

**School of Humanities
Department of Education**

**An investigation of self-regulated learning of young adults in
a Business Vocational Education and Training program**

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Master of Philosophy
of
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Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date:

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Abstract

National reform in vocational education and training (VET) and the raising of the school leaving age legislation in Western Australia have resulted in an increasing proportion of young adults in VET programs. VET teaching and learning practices are learner-centred, work-centred and attribute-focused. A shift from a teacher-centred approach to a more learner-centred approach can be a major transition for some younger learners. The challenge for practitioners is to help these young adults develop generic, transferable employability skills and attributes, in order to facilitate self-directed lifelong learning.

Educational psychologists and policy makers view academic self-regulation as the key to successful learning in school and further education; however, agree that most learners struggle to attain this in their methods of study. The term ‘academic self-regulation’ is synonymous with self-directed learning. The primary research question for this study was:

What are the self-regulatory characteristics of 18- to 24-year-olds completing a business administration assessment?

Specifically:

- 1 What cognitive strategies did they use to comprehend and perform the task?
- 2 What metacognitive strategies did they use to control and regulate their cognition?
- 3 How did they regulate their behaviour?

Within the framework of a social cognitive view of learning, this study adopted a phenomenological approach. A purposive sample group of eight students aged from 18 to 24, participated in the study. Participants were full-time Certificate IV Business Administration students enrolled at a TAFE college in Perth, Western Australia. Their four teachers also participated. This study was intended to produce inferences that may suggest ways we can better understand academic self-regulation.

Semi-structured interviews with the participants were undertaken after the submission of a written assessment task and the teachers were interviewed at the end of the semester. Raw data were coded using broad categories from Pintrich’s (2004)

theoretical framework. Data were then reduced to clusters of statements and placed into categories. Case by case results provide a snapshot of each case and cross-case results have been reported under six major themes. Quality control was achieved through a combination of data from participant interviews, teacher interviews and the researcher's interpretations; the latter have been linked to previous research and reviewed through peer debriefing.

Findings suggest that the self-regulation characteristics of these young learners are dependent on a range of factors, including: purpose of engagement; differences in developmental stage, culture, commitments, and learning environment; and the task. This thesis identifies areas for further research; specifically, the relationship between personality and styles of self-regulation, practitioner education programs that support early identification and intervention for students with learning difficulties and the impact of internet distractions on time and effort.

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1 INTRODUCTION

1.1 Overview

This study was designed to investigate the self-regulation characteristics of a group of 18-24-year-olds enrolled in a Certificate IV in Business Administration at a Technical and Further Education College (TAFE) in Perth. A phenomenological study was conducted with the aim of understanding self-regulation and explaining self-regulation through how it was perceived by students and their teachers. The study probed deeply into the characteristics of a sample of eight students. It was intended to produce inferences that may suggest ways we can better understand academic self-regulation. This chapter explains the background of the study, the research objectives, significance of the study and ends with an outline of the thesis structure.

1.2 Background

National reform in vocational education and training (VET) and the raising of the school leaving age legislation in Western Australia have resulted in an increasing proportion of young adults enrolling in VET programs. In 2009 to 2010, the Western Australian government, together with the Commonwealth, implemented reforms that focused on maximising engagement, attainment and successful transitions for young people. The aim was to provide better education, training and transition outcomes for 15- to 24-year-olds by assisting these young people in gaining skills and strengthening their engagement in education and training. Under the new reforms, publicly funded Registered Training Organisations are obliged to give priority entrance to training to eligible 15- to 24-year-olds (Department of Education, Employment and Workforce Development, 2011b). The Western Australian Youth Attainment and Transitions Annual Report of May 2011 documented that in 2010, there were in excess of 51,000 15- to 19-year-olds and 27,000 20- to 24-year-olds enrolled in VET public provider training courses.

The transition from school to further education places many demands on young adults, who are often concurrently managing transitions in social roles, physical changes and important career decisions. VET teaching and learning practices are

learner-centred, work-centred and attribute-focused. A shift from a teacher-centred approach to a more learner-centred approach can be a major transition for some younger learners (Bandura, 2006). A challenge for practitioners is to help these young adults develop generic, transferable employability skills and attributes, in order to facilitate self-directed lifelong learning.

The term 'academic self-regulation' is synonymous with self-directed learning; that is, students taking control of their learning. This study was concerned with identifying and understanding the self-regulation phenomenon as it was perceived by a group of eight students and their teachers in a specific learning situation. The primary source of data collection were semi-structured interviews with a purposive sample group of eight business students and their four teachers. The theoretical framework was Pintrich's (2004) model of self-regulation, and interview questions were developed using categories from this (See Appendix 1).

This study is embedded within the context of a simulated consultancy business where students act as employees to undertake group projects and individual tasks in order to gain competency in eight units from the Certificate IV in Business Administration. Teachers act as facilitators or managers. The assessment task directed students to research and write a report of no more than 1000 words, outlining a job role they were interested in and the skills required to perform this role. This was to be prepared within a two-week timeframe outside of the classroom and submitted to their teachers for marking.

Interviews were undertaken with the students and their four teachers after the submission of this assessment task. The interviews were recorded and transcribed. Initially, the raw data were coded using broad categories from Pintrich's theoretical framework. Data were then reduced to clusters of statements and placed into six major categories. Results have been written up case by case to provide a snapshot of each case. Cross-case results have been reported under the six major categories and teachers' results have been integrated and reported within four of these categories.

Students' and teachers' constructions of their own reality and the researcher's interpretations were fundamental to answering the research questions. Quality control was achieved through a combination of data from the participant interviews, the teacher interviews and the researcher's interpretations; the latter have been linked

to previous research and reviewed through peer debriefing. Because the aim of this research was to understand self-regulation from the participant's and teacher's point of view, numerous quotes have been included in the results and discussion.

1.3 Research objectives

Contemporary VET policy and practice emphasises the full learning potential of individuals and seek to actively engage them in the planning, development and construction of their own vocational knowledge and skills (Chappell, 2004). While students taking control of their learning is an important aspect of VET learning environments as well as the changing work environment, findings suggest that VET students are generally not well equipped to do this (Choy & Delahaye, 2005; Cordingley, Lai, Pemberton; Smith & Dalton, 2005; Smith & Volet, 1998). This is supported by Zimmerman (2002), who claims that while educational psychologists and policy makers view academic self-regulation as the key to successful learning in school and further education, most learners struggle to attain this in their methods of study. Pintrich also describes continual surprise at the number of students who enter college with "...very little metacognitive knowledge; knowledge about different strategies, different cognitive tasks, and, particularly, accurate knowledge about themselves" (2002, p. 223).

The intent of this research was to investigate the self-regulation characteristics of young adults within the context of a specific learning activity in a VET business program. The aim was to understand self-regulation through student and teacher perceptions.

The primary research question was:

What are the self-regulatory characteristics of 18-24 year olds completing a business administration assessment?

Specifically:

- 4 What cognitive strategies did they use to comprehend and perform the task?
- 5 What metacognitive strategies did they use to control and regulate their cognition?
- 6 How did they regulate their behaviour?

1.4 Significance of study

Research into academic self-regulation continues to evolve, and proponents acknowledge the complexity of this “elusive but desirable quality” (Zimmerman, 2002, p. 66). Much of the research in this area to date relates to school children and adult learners, however, young adults, aged between 18 and 24, make up the larger portion of learners in tertiary institutions. Research into the self-regulation characteristics of these learners is important.

A key priority area for the Western Australian Government is maximising engagement, attainment and successful transitions for young people. The Youth Attainment and Transitions Annual Report of May 2011 states: “For those at educational risk, particularly early school leavers, the future is less optimistic. Unless there is effective transition support for these young people, they tend to move between periods of unemployment, low level employment and job churning” (p. 6). Karmel and Woods (2008) reported that the percentage of 15- to 24-year-olds that completed a VET award was low, especially at Certificate III level or higher. Understanding the self-regulation characteristics of this group is important. Such an understanding could inform improved teaching and learning practices in VET, and this is significantly related to current reform that focuses on maximising engagement, attainment and successful transitions for young people.

In addition, themes that emerge from this research provide the basis for further research into self-regulation and academic achievement in this group. This could be relevant to the development of policy initiatives relating to sustainable quality teaching and learning practices for young adults in VET and other tertiary settings.

1.5 Summary

The first chapter of this thesis briefly outlines the background of the study, the research objectives and the significance of this study. Chapter 2 is a review of the literature about vocational education and training in Australia, the characteristics of youth learners and the principles of academic self-regulation. Chapter 3 describes the research methodology. Chapter 4 presents the results case by case and then across-case. Chapter 5 is a discussion of the results with regard to the literature, and Chapter 6 concludes with responses to the research questions and implications for future research.

2 LITERATURE REVIEW

2.1 Overview

This chapter reviews vocational education and training (VET) in Australia including current reforms and teaching and learning practices. Following this is a discussion of the characteristics of youth learners, followed by a review of academic self-regulation, definitions, theories and methods of inquiry.

2.2 VET in Australia

The Department of Education, Employment and Workplace Relations (DEEWR) is the government department that nationally directs the post-school education and training sector in Australia. It describes vocational education and training as a training and skills sector that

gives Australians the opportunity to gain the skills they need to enter the workforce for the first time, to re-enter the workforce, to retrain for a new job or to upgrade their skills for an existing job. Australian Apprenticeships are available in traditional trades, and in a diverse range of emerging careers, in most sectors of business and industry. (DEEWR, 2011c, p. 1)

VET qualifications range from Certificate I through to Advanced Diploma, and are delivered by Registered Training Organisations (RTOs). RTOs were established in the late 1990s to provide a variety of diverse pathways to enable individuals to undertake VET programs. Central to these programs has been the development and implementation of nationally endorsed training packages across all industry sectors, and a quality assurance framework. Training packages outline competency standards and employability skills for vocational qualifications across industry sectors. Industry-specific training packages require students to demonstrate their skills and knowledge under workplace conditions (The Western Australian Department of Training, 2002).

In 2005, Raising the School Leaving Age Legislation was enforced in Western Australia. Under this legislation, youth are required to remain in school, training or

approved full-time employment, or combinations of part-time education/training and employment until the age of 17 (DEEWR, 2011b). Secondary students are able to undertake vocational education and training courses in addition to their school studies, or move from school to full-time VET, or a combination of part-time VET and work (Australian Curriculum Assessment and Reporting Authority, 2011). Our Youth, Our Future: Post-compulsory Education Review (2002) endorsed by the Western Australian Government explains the directions of post-compulsory education and the embedding of VET into the school system. In Years 11 and 12 VET units of competency are made available through integration into a general course, as a complementary course with VET competencies only or as stand-alone VET.

Figgis sums up the “astonishingly diverse” VET sector:

To start with, there is the breadth of industries and subject areas. Then there are differences in the skill levels being developed, in the ages of the learners and their backgrounds. Registered training organisations in Australia differ markedly in size and scope; some are private, some public. (2009, p. 9)

2.2.1 VET reform 2011 to 2014

Recent national reforms in training and education have blurred the divide between the higher education and VET sectors, and Karmel (2011, p. 6) claims that the definition of VET is as “clear as mud”. Mixed sector and dual sector institutions have emerged, many universities are now RTOs issuing VET qualifications and some institutes of technical and further education (TAFE) are awarding university degrees (Karmel, 2011). Wheelahan, Arkoudis, Moodie, Fredman and Bexley describe current reforms that have also blurred the divide between public and private institutions. They state:

Students undertaking private or full-fee higher education and high-level VET programs are able to access income-contingent loans, and this is

weakening the distinction between government-funded places and full-fee places in both VET and higher education. (2011, p. 8)

Another significant area of reform in DEEWR's 2011-2014 Strategic Plan is a focus on increasing the education levels of those without secondary school qualifications. The objective is to "enable all students to acquire the knowledge and skills to participate effectively in society and employment in a globalised economy and make successful transitions to further education, training and work" (DEEWR 2011a, p. 1). This is a key priority area for the Western Australian Government. Although Western Australia has a strong economic climate, the Youth Attainment and Transitions Annual Report of May 2011 documents that this presents opportunities as well as challenges for younger people. The report states "For those at educational risk, particularly early school leavers, the future is less optimistic. Unless there is effective transition support for these young people, they tend to move between periods of unemployment, low level employment and job churning" (p. 6).

From 2009 to 2010, the Western Australian government, together with the Commonwealth, implemented reforms that focused on maximising engagement, attainment and successful transitions for young people. The aim was to provide better education, training and transition outcomes for 15- to 24-year-olds by assisting these young people in gaining skills and strengthening their engagement in education and training. Under the new reforms, publicly funded RTOs are obliged to give priority entrance to training to eligible 15- to 24-year-olds (DEEWR, 2011b). The Western Australian Youth Attainment and Transitions Annual Report of May 2011 documented that in 2010 there were in excess of 51,000 15- to 19-year-olds and 27,000 20- to 24-year-olds enrolled in VET public provider training courses.

Based on data from the National Centre for Vocational Education Research and the Australian Bureau of Statistics Survey of Education and Training, Karmel and Woods (2008) conclude that approximately 50% of early school leavers (15- to 24-year-olds) accessed VET within four years of leaving school. However, the percentage that completed an award was low, especially at Certificate III level or higher. "Our estimate suggests that 11% of male and 12% of female early school

leavers complete a certificate III or higher VET qualification within four years of leaving school” (p. 8).

Clearly, the needs of younger learners in VET could be better addressed in order to maximise engagement, attainment and successful transitions. The next section of this literature review examines teaching and learning practice in VET in Australia.

2.2.2 Teaching and learning practice in VET

A primary goal of education is to “equip students with the intellectual tools, self-beliefs and self-regulatory capabilities to educate themselves throughout their lifetime” (Bandura, 2006, p. 10). VET policy and practice seeks to “actively engage learners in the planning, development and construction of their own vocational knowledge and skills” (Chappell, 2004, p. 5). Teaching and learning practices in VET are varied and address a wide range of industries and subject areas. The students are a diverse group with differences in skill levels, backgrounds and age. VET qualifications are delivered in a variety of learning situations, including the classroom, simulated work environments, on-line, in the workplace and via other modes of flexible delivery. Figgis (2009) describes authentic tasks, peer learning, e-learning, personalised learning, and work-based learning as some of the contemporary teaching and learning practices that are used to develop the skills and knowledge of VET learners.

In order to address the diverse cohort of learners and the range of learning situations, VET practitioners must be skilled professionals who:

- have a sophisticated pedagogical repertoire
- use more learner-centred, work-centred and attribute-focused approaches, rather than traditional transmission pedagogies
- can work with multiple clients, in multiple contexts and across multiple learning sites
- understand that the integration of learning and work is a major feature of the contemporary work environment. (Western Australian Department of Education and Training, 2006, p. 24)

Figgis (2009, p. 25) sums the attributes of innovative practitioners as “reflective of their practice, responsive to their learners, engaged with local enterprises and engaged with one another.”

In 2006, employability skills were embedded into training packages. The employability skills framework was developed in response to employers’ needs and emphasised generic learning processes, including “responsible” and “reflective” learning. “Responsible learning” was described as a process where learners take ownership of their learning and work independently to develop new knowledge and participate in activities to increase their skills. “Reflective learning” was described as a systematic process where learners appraise their learning experience and examine changes in their “perceptions, goals, confidences and motivations” (Department of Education Science and Training pp. 46-47). In proposed amendments to the Employability Skills Framework in 2011, self-management of learning remains a key element (DEEWR, 2012).

Raising the school leaving age in Western Australia has resulted in an increasing proportion of younger students in VET. A challenge for practitioners is to help these younger students develop generic, transferable employability skills and attributes to facilitate independent lifelong learning. A shift of control from teacher to student can pose a major transition for some younger learners (Bandura, 2006). The next section of this literature review examines the characteristics of youth learners.

2.3 Characteristics of youth learners

Education transitions can be detrimental or beneficial. The transition from school to further education places many demands on young adults who are often concurrently managing transitions in social roles, physical changes and important career decisions (Bandura, 2006). Briggs, Clark and Hall (2012), exploring the challenges of ensuring successful transition from school or college to university, document that for first year university students the challenge of managing their finances, familiarising themselves with a new environment and making new acquaintances appears more important for these students than the challenge of learning independently. They are often more concerned about achieving a balance between academic activities and other aspects of life, including family life and paid work.

It is important for young learners to be committed to a goal that gives a sense of purpose and achievement to prevent them from becoming bored and reliant on extrinsic motivators (Bandura, 2006). Black, Polidano, Tabasso and Tseng (2011, p. 5) report that “those who leave school with a career plan to find employment or continue studying are statistically more confident, agreeable, calm and hardworking than those who leave for other reasons.”

According to Choy and Delahaye (2005), youth from 17 to 24 years made up a larger portion of learners in tertiary institutions, but research about their learning had not attracted the same amount of attention as adult learning. Choy and Delahaye (2003) conducted a major research project that investigated youth learning. 448 youths (aged 18 to 24 years) from TAFE (59%) and university (41%) participated in the study. Findings suggested that generally, these youths were surface learners with a low level of readiness for self-directed learning but a high preference for a combination of structured and unstructured learning. Choy and Delahaye (2005, p. 2) established that a surface approach to learning was largely due to “time constraints, volume of content and assessment requirements that reward outcomes achieved through a surface approach.”

Cordingley, Lai, Pemberton, Smith and Volet (1998) report that first year VET students straight from high school would benefit from methods of instruction that encouraged shared control until they are fully self-regulated learners. Similarly, Smith and Dalton (2005) claim that research in the VET sector suggests that more attention needs to be paid to the development of self-directed learning skills in the lower level certificates, to assist with engagement and academic success at higher levels. They state that VET students do not generally have well-developed metacognitive strategies, which they define as “the strategies which help a learner to effectively plan, monitor and evaluate their own learning” (p. 12). A consequence of this is a lower degree of self-directed learning and greater dependence on the teacher.

Isaacson and Fujita (2006) conducted a study with eighty-four undergraduate psychology students. The students completed ten weekly in-class tests and were allowed to choose the test questions. The findings established that the students who

struggled tended to lack metacognitive skills and study strategies to self-monitor their knowledge, while the higher achievers were better skilled in this area:

...expert students were effective at estimating their understanding (postdicting their test scores) and they were more inclined to vary their goals and self-efficacy based on past results and feedback they receive from taking a test. Expert students in this study were also more likely to make choices which demonstrate mastery and non-mastery of tasks from varying levels of difficulty.... Low achieving students frequently over-estimate how well they knew a body of information, which leads to disengagement early during studying. This process typically results in failing the test, which often leads them to blame the teacher or test for their failure instead of assessing their own learning. (Isaacson & Fujita, 2006, pp 52-53)

Isaacson and Fujita (2006) demonstrate how crucial it is for learners in tertiary education to possess the metacognitive skills to evaluate their mastery. Bandura (2006, p. 10) explains metacognitive skills as “selecting appropriate strategies, testing comprehension and state of knowledge, correcting one’s deficiencies and recognising the utility of cognitive strategies.”

A longitudinal study conducted by Boekarts, Otten, and Simons, 1997 (cited in Boekarts, 1999) using Vermunt’s learning styles found that approximately 70% of young adolescents in high school mainly used a surface learning style, while 17% used a concrete style and 16% used deep level processing (Boekarts, 1999, p. 448). Boekarts (1999) describes surface learning as concerned with memorisation and literal production of learning content with no conceptual integration. Concrete learning is described as a process where learners are able to connect relevant information to long-term memory and everyday problems. Deep level processing is where learners achieve conceptual integration, derive pleasure from learning new information and are able to structure it in a way that is meaningful. Vermunt (1996) expands on this and describes associations between: deep level processing and a preference for internal regulation; surface level processing and a preference for

external regulation; and concrete processing, where there is a preference for a combination of internal and external regulation.

Boekarts (1999, p. 447) considers that an issue with these young adolescents is their capacity to “select, combine and coordinate cognitive strategies in an effective way.” Montalvo and Torres (2004, p. 4) state that students who regulate their learning effectively perceive themselves as agents of their own behaviour. They believe that learning is proactive; they are self-motivated and are successful in employing strategies to achieve the desired academic outcomes. Good students are aware of what they know and what they do not know and are able to translate this into specific strategies. Poor learners may have some degree of awareness but have difficulty translating this awareness into specific strategies that can be applied to a problem.

Livingston, Soden and Kirkwood (2004) reviewed literature from Australia, Israel, North America, Western Europe and the United Kingdom in order to determine an appropriate program to develop thinking skills for “post-16” learners. They suggest that a move away from learning settings that are too prescriptive would give students more scope to develop their thinking skills. Listed below are the key principles of effective learning centres that they derived from their research:

- They encourage the learners to change their understanding – in general, they are constructivist in origin.
- They help students to transfer their learning.
- They promote learning with others.
- They encourage students to regulate their behaviour.
- They challenge the learner.
- They are carefully structured to employ measures to ease students into tasks and to establish personal meaning for the learners.
- They develop skills such as concept formation, enquiry and reasoning skills, which better equip students to be independent learners.
- They make students think about thinking. (2004, p. 2)

These key principles, together with the other learning attributes referred to in this section, are facets of a complex phenomenon known as “academic self-regulation”. Academic self-regulation is viewed by educational psychologists and policy makers as the key to successful learning in school and further education; however, according to Zimmerman (2002, p. 66) most students struggle to attain this “elusive but desirable quality” in their methods of study. The next section of this literature review examines the principles of academic self-regulation and includes definitions, theories and methods of inquiry.

2.4 Principles of self-regulation

2.4.1 Definition and theories

The term “academic self-regulation” is synonymous with “self-directed learning”; that is, students taking control of their learning. Academic self-regulation has diverse theoretical origins and numerous definitions. According to Boekaerts (1999), three different schools of thought have contributed to our understanding of this complex phenomenon: “1. research on learning styles, 2. research on metacognition and regulation styles and 3. theories of the self, including goal-directed behaviour” (p. 447).

Wolters, Pintrich and Karabenick (2003, p. 5) define self-regulated learning as “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation and behaviour, guided and constrained by their goals and the contextual features in the environment.” Boekaerts (1999, p. 447) describes self-regulated learning as a “series of reciprocally related cognitive and affective processes that operate together on different components of the information processing system.” Zimmerman’s definition of academic self-regulation in 1989 (cited in Berry & West, 1993, p. 372) is explained as “one’s confidence related to the application of metacognitive skills (e.g. planning, monitoring, organizing, strategy selection, etc.) in academic settings.”

Pintrich and De Groot (1990, p. 38) claim that “student involvement in self-regulated learning is tied to efficacy beliefs about their capability to perform classroom tasks

and their beliefs that these tasks are interesting and worth learning.” The concept of “self-efficacy” was introduced by Albert Bandura in 1977 and is defined by Berry and West (1993, p. 351) as “an individual’s sense of competence and confidence related to performance in a given domain.” Bandura (1989) discovered that the development of resilient self-efficacy in adolescents requires experience in mastering difficulties through perseverance. Schunk, 1989 (cited in Berry & West, p. 372) expanded on this theory and made the distinction between “confidence in acquiring and applying new skills, versus confidence in performing existing skills.”

Self-regulation involves the development and transfer of self-regulation processes (skills, knowledge and attitude) to different learning situations and contexts, including work and leisure (Boekarts, 1999). Zimmerman (2004) summed up contemporary self-regulation research by explaining that self-regulation is not a single trait but involves use of specific processes that must be individually adapted to each task. He states that the degree of students’ learning varies according to the absence or presence of any of the following key self-regulatory processes:

...(a) setting specific proximal goals for oneself, (b) adopting powerful strategies for attaining the goals, (c) monitoring one’s performance selectively for signs of progress, (d) restructuring one’s physical and social context to make it compatible with ones’ goals, (e) managing one’s time use efficiently, (f) self-evaluating ones’ methods, (g) attributing causation to results and (h) adapting future methods. (p. 3)

Self-regulation is a complex phenomenon and has been theorised in a number of ways, with “different terms and labels for similar facets of the construct” (Boekarts 1999, p. 447). Most theories highlight the importance of behavioural, motivational and metacognitive processes.

Models of self-regulation have aimed to identify relationships between self-regulation processes and academic performance. Zimmerman (2004) explains that social learning psychologists identify three cyclical phases in self-regulatory processes: forethought, performance and self-reflection. Within each phase are two major classes. These are: task analysis and self-motivation in the forethought phase,

self-control and self-observation in the performance phase, and self-judgment and self-reaction in the self-reflection phase.

Pintrich's (2004, p. 390) theoretical framework "Phases and Areas for Self-Regulated Learning" organises the self-regulation process into four phases: planning, monitoring, control, and reaction and reflection. Within the four phases, self-regulation activities are organised into four columns: cognition, motivation/affect, behaviour and context. Pintrich's model includes a category for context, and his view is that motivation is not only influenced and controlled by the individual but also by the context, which may be modified by a student's behaviour. Boekaerts (1999, p. 453) believes that the learning context has the ability to act as a powerful facilitator of academic self-regulation, and states that "many researchers and educators do not acknowledge the bidirectional relationship between learning environments and self-regulated learning."

Although models of self-regulation represent a time-ordered sequence, there can be no assumption that the phases occur in a hierarchical or linear fashion. Pintrich (2004) states that in most models of self-regulation, the phases can occur altogether and dynamically as the individual progresses through the task: "...the goals and plans being changed or updated on the basis of the feedback from the monitoring, control and reaction processes" (p. 389). There are occasions when students are required to learn in more "tacit or implicit or unintentional ways" (p. 389) and self-regulation does not necessarily follow an explicit model.

Pintrich's theoretical framework "Phases and Areas for Self-Regulated Learning" (2004, p. 390) has been chosen to guide this study because of its global and comprehensive nature and its relevance to VET teaching and learning practices, where students develop their skills in a variety of learning situations and are required to self-manage resources. Pintrich's model proposes a number of different strategies that college students may use to regulate their learning, and he has compared his model to learning models that commonly use only two broad approaches to learning — surface and deep. Pintrich's model identifies cognitive learning strategies, metacognitive and regulation strategies, and resource management strategies as the

specific strategies that students may access in order to regulate their learning. These are explained further in Chapter 3.

2.4.2 Methods of inquiry into academic self-regulation

The self-report questionnaire has been one of the most commonly used methods of inquiry into self-regulated learning. Self-report questionnaires include the motivational strategies for learning questionnaire (MSLQ) developed by Wolters, Pintrich and Karabenick in 2003, and the Learning and Study Strategies Inventory (LASSI) developed by Weinstein, Schulte and Palmer in 1987 (cited in Montalvo & Torres, 2004).

The MSLQ has been used with high school students and students in college or university. It is a self-report instrument that uses a Likert scale. It specifies contexts as “in class” or “in this subject”. Students are asked about their cognitive and metacognitive strategies for learning. The LASSI is designed to assess learning strategy used by university students and includes scales for attitude, motivation, time organisation, anxiety, concentration, information processing, selection of main ideas, use of techniques and support materials, self-assessment and testing strategies (Montalvo & Torres, 2004).

Another widely used instrument is the self-regulated learning interview schedule (SRLIS) developed by Zimmerman and Pons in 1986. The SRLIS presents familiar learning scenarios and invites students to say how they respond to these situations. It also measures how frequently or consistently each self-regulation strategy is used by the student. It includes a teacher’s scale for researchers who wish to gather comparative data (Montalvo & Torres, 2004).

In an attempt to clarify and classify instruments used to evaluate self-regulation, Winne and Perry 2000 (cited in Montalvo & Torres, 2004) distinguish between self-regulation instruments that measure self-regulated learning as an aptitude and those that measure self-regulated learning as an event.

In 1994, Zimmerman (cited in Schunk & Zimmerman, 1994, p. 305) noted that research into academic self-regulation had primarily considered two objectives:

“describing characteristics of students who are highly self-regulated (descriptive studies) and teaching students self-regulatory processes and strategies (intervention studies).” Schunk and Zimmerman (1994, p. 310) emphasised the need for greater exploration of the development of self-regulatory processes in real learning settings. For example, one recommendation was for “naturalistic studies involving only one or a few students with significant self regulating problems, in which changes in performance were assessed over time, along with continued use of self-regulatory activities after training was discontinued.”

Learning environments and learning activities influence the form of control that is exercised, that is: internal (students determining their own learning goals); external (students dependent on teacher); or shared (student and teacher working together) (Boekarts, 1999; Schunk & Zimmerman, 1994; Vermunt, 1996). According to Schunk and Zimmerman (1994) self-regulation is difficult to study in students who are given no choice in methods, time and resources, which is often the case in classroom settings. Cordingley, Lai, Pemberton, Smith and Volet (1998) encountered a number of conceptual and methodological issues in their exploratory study of self-regulation in students of an enrolled nursing course at TAFE. One of these issues was a strong teacher-regulated instructional approach, where assessments relied heavily on tests and knowledge-telling essays.

Patrick and Middleton (2002, p. 28) recommend qualitative methods for investigating self regulated learning “...because they involve rich, holistic descriptions, emphasise the social settings in which the phenomena are embedded, do not make assumptions about intra-individual stability, and are oriented to revealing complexity”. Yin (2003, p. 13) suggests multiple case study as an appropriate method of investigating “...a contemporary phenomenon within a real-life context, especially when the boundaries between phenomenon and context are not clearly evident.”

Methodological issues associated with investigating self-regulation in a teacher-regulated instructional approach, and the need for greater exploration of the development of self-regulatory processes in real learning settings have been considered. Based on the literature review, this study adopted a phenomenological

approach to investigate the self-regulation characteristics of a group of 18- to 24-year-old students enrolled in a Business Administration Certificate at a VET College in Perth, Western Australia.

2.5 Summary

In summary, raising the school leaving age in Western Australia and national VET reform has resulted in an increasing proportion of young adults enrolling in vocational education and training programs. A challenge for practitioners is to help these younger students develop generic transferable employability skills and attributes to facilitate independent lifelong learning. The shift of control from teacher to student can pose a major transition for some younger learners, and a need for further research into the self-regulation characteristics of this cohort has been identified.

The literature portrays the complexity of self-regulated learning. Generally, self-regulation theories highlight the importance of behavioural, motivational and metacognitive processes. Pintrich's theoretical framework, "Phases and Areas for Self-Regulated Learning" (2004, p. 390), has been chosen to guide this study because of its global and comprehensive nature and its relevance to VET teaching and learning practices, where students develop their skills in a variety of learning situations and are required to regulate their learning. (See Appendix 1)

Research into academic self-regulation continues to evolve and proponents acknowledge the complexity of this phenomenon. A recurrent theme in the literature is the need for a multidimensional approach. The next chapter of this thesis describes the research approach.

3 METHODOLOGY

3.1 Overview

This chapter outlines the research approach that was used to investigate the self-regulation characteristics of a group of eight students enrolled in a Certificate IV in Business Administration at a TAFE college in Perth. It includes a description of the setting in which the research was conducted, the data collection tools, data analysis technique, how quality control was maintained and other ethical considerations.

3.2 Research approach

Social cognitive theorists propose that learning is the result of the interplay of a range of actions, environmental factors and behavioural elements. Learning is social in nature and can occur from observation and interaction with others (Schunk, 2008). Based on a social cognitive view of learning, this study adopted a “phenomenological” approach. Specifically, this study was concerned with identifying and understanding the self-regulation phenomena through how it was perceived by a group of eight students and their teachers in a particular learning situation. Students’ and teachers’ constructions of their own reality and the researcher’s interpretations were fundamental to answering the research questions (Lester, 1999).

3.2.1 Setting

This study was embedded within the context of a simulated work environment at a VET college in Perth, Western Australia. Eight of ten units of competency that comprise the Certificate IV in Business Administration were taught in this environment. In this learning environment, students run a simulated consultancy business and are employed to undertake group projects as well as individual tasks. This engages the students in self-directed activities and experiential learning that link theoretical knowledge to practical skills. Realistic projects and individual tasks have been created to assess multiple units of competence and to provide students with employability skills. Teachers act as facilitators or managers.

3.2.2 Sample

A purposive sample group of eight students, three male and five female, aged between 18 and 24, participated in the study. This specific age group was chosen because the researcher believed they would be better able to articulate their learning strategies. Participants were full-time business students enrolled in a Certificate IV in Business Administration at a TAFE college in Perth, Western Australia. Their teachers were also interviewed. For this study, as the students came from two different streams, there was a total of four teachers and one was the researcher.

3.2.3 Student activity

The study aimed to identify the students' self-regulated learning strategies within a specific student activity. The unit of competence chosen for this study was titled "Establish Networks". This unit addresses the skills required to develop and maintain effective work relationships and networks. The activity was an individual assessment task that required students to individually prepare a written report within a two-week timeframe outside of the classroom. The assessment task was administered to both streams in week two of a twenty week semester. This task was chosen because it gave the student choices in terms of content and processes for researching, although it was more prescriptive in terms of writing and compiling the report. (See Appendix 10)

Students from both streams were given similar oral instructions by their teachers to complement the written outline of the assessment task. They were to research a job role they aspired to and write a report of no more than 1000 words outlining the job and the skills they would require to perform that job. During the research phase, students were expected to establish networks that would be effective in helping them attain their chosen occupation and describe these in their report. They were also asked to include a mind map and database of their networks.

Two teachers jointly facilitate in this learning environment and the students had not been taught by any of the teachers previously. Teachers make themselves available to give students guidance and feedback during the process. Students are generally given two opportunities at submission with the notion that competency is achieved at different stages for each learner. (p. 20)

3.3 Data collection tools

The primary source of data collection was semi-structured interviews conducted with the eight participants and their four teachers after submission of the report. Each student interview took approximately 20 minutes. The teacher interviews took approximately 50 minutes. The following sections describe the student and teacher interview schedules.

3.3.1 Student semi-structured interviews

Twelve interview questions guided by Pintrich's (2004) self-regulation model were constructed and sorted into four groups – cognitive learning strategies, metacognitive learning strategies, behaviour, reaction and reflection. Semi-structured interview questions were contextualised to the report writing task and were open-ended with probes. Interview questions and probes were used as a guide only, allowing the interviewer to clarify responses and ask questions appropriate to the participant's knowledge. The interview schedule included an area for the interviewer to record any observations and reflections. (See Appendix 2)

Cognitive learning strategies

Enquiry into cognitive learning strategies focused on elaboration, organisation and critical thinking. Elaboration strategies assist the learner in integrating and connecting new information with prior knowledge (Pintrich, 2004; Schunk, 2008). In this study, enquiry into elaboration strategies focused on the connections between the task and prior knowledge related to the course content, the research process and/or the report writing. Critical thinking focused on the degree of application of prior knowledge to solve problems, reach decisions and evaluate new information. Organisation strategies help the learner to select suitable information and make associations with the information to be learned. In this study, enquiry into organising strategies for the report writing task focused on systems for tracking and organising materials, and deciding what information should or should not be included in the report (Pintrich, 2004; Schunk, 2008).

Metacognitive learning strategies

The study focused on three broad processes that make up metacognitive self-regulatory activities — planning, monitoring and regulating (Pintrich, 2004). For this study, enquiry into planning activities focused on the drafting and writing of the

report. Enquiry into monitoring and regulating activities focused on the monitoring of writing, structure adherence and revision of the report.

Behaviour

Areas of enquiry into behaviour focused on time management, the study environment and help seeking. Strategies for effectively managing time and the study environment included planning and scheduling time and choosing an environment that was organised and free from distraction. Help-seeking focused on whether the students sought help independently from the teacher, their peers or anyone else to help clarify and understand the activity (Pintrich, 2004).

Reaction and reflection

At the end of the interview, participants were asked to reflect on the activity. This category of questions was included to elicit the participant's reaction to their performance of this task, and their reflection on the outcome and causal attribution (Zimmerman, 2002). Self-reflections are important because they can influence thoughts and beliefs preceding subsequent learning activities (Zimmerman, 1998).

3.3.2 Teacher semi-structured interviews

The interview schedule used with the teachers comprised eight questions that were linked to the questions on the student interview schedule. The interview schedule was used to extract the teachers' perceptions of the student's planning and organising ability, proofreading skills, ability to follow instructions, feedback response, overall effort put into assessments, time management, self-awareness and help-seeking. Although the interview schedule invited the teachers to rate the student's aptitude, it was used informally by the interviewer to stimulate conversation in relation to the teachers' observations and perceptions of the participants over the 20-week duration of the course. This also gave the interviewer an opportunity to discuss her own observations with the teachers. (See Appendix 3)

3.3.3 Refinement of data collection tools

The semi-structured interview schedule that was used with the students was approved by Curtin University's Human Research Ethics Committee prior to administration. It was piloted in September 2009 with five students from the

Certificate IV in Business Administration. The Director of Research and Development, School of Education at Curtin University provided feedback on the format of the interview schedule, and the Director of Learning and Teaching, School of Communications and Arts at Edith Cowan University provided feedback on questioning techniques that effectively extract data from students on the self-regulation phenomenon. The Manager of the Quality and Research Unit at the TAFE college where the study was conducted provided feedback on the language and suitability of the interview questions in a VET context.

In response to debriefing with these experts and the outcomes of the pilot study, changes were made to the interview schedule. Language was simplified and the length reduced. Leading questions and questions that tended to encourage yes/no answers were reworded and some questions deleted. There were three components of the task — researching, writing and content knowledge; this created confusion at the pilot interview, so probes were added to incorporate responses from all three areas. The teacher interview schedule was piloted with the teachers, and in response to their feedback, some labels for the ratings were amended because they were similar and confusing.

3.4 Data analysis

Interviews with the students and their teachers were recorded and transcribed verbatim by the researcher. The data were read several times and ideas for coding were marked in the margin of each of the transcripts. Transcripts were also intermittently checked against the audio recordings for accuracy. From multiple readings of the raw data four broad categories derived from Pintrich's model of self-regulation were initially used to manually sort and code the data case by case. Data that matched the categories were cut and pasted into a separate document for each participant under the appropriate category. Data were further reduced and clusters of statements for each case were then arranged into six major categories and eighteen subcategories that emerged from the data. Clusters of statements from teacher interviews were sorted into four of the six major categories and five subcategories. These were added to the individual cases. (See Tables 1 and 2, Chapter 4). Feedback concerning accuracy and completeness of the data collection and data analysis

procedures was provided by peer debriefing with the three experts who provided feedback on the participant interview schedule.

Cross-case analysis attempted to identify the main emerging themes that signified the self-regulation phenomenon. However, it was found that the data became less meaningful when it was decontextualised. Even though participants were asked similar questions, the themes were more or less relevant depending on the individual. For example, it was no longer evident when an instance of self-awareness in one individual was more compelling than in another. Therefore, analysis of individual cases was performed primarily to enable the researcher to understand the self-regulation characteristics that occur as part of a “pattern formed by the confluence of meaning within individual accounts” (Ayers, Kavanaugh & Knafl, 2003, p. 873). Clustered statements with labels from the interviews with the students and their teachers were written up in narrative form. This provided a snapshot of each case and allowed the researcher to “understand the individual account in its own context” and then develop “a synthesis that captured the essence or variation of experience across individuals” (Ayers et al., 2003, p. 881). Synthesis across the cases was achieved by placing individual cases in rows and attributes in columns. By inspecting the columns the critical attributes across the cases became more obvious (Miles & Huberman, 1994). Six themes emerged across the cases:

- Existing knowledge awareness
- Organising information
- Planning and writing
- Monitoring writing progress
- Regulation of study environment
- Reaction and reflection.

3.5 Quality control mechanisms

Student interviews were conducted at a time mutually agreed between the teachers and the participants. This was unobtrusive and ensured minimum disruption to learning. Interviews were conducted in the lunch-room or garden area outside of the lunch room. This was chosen because it was considered to be a non-threatening, congenial and social environment (Miles & Huberman, 1994). Interviews with the

teachers were conducted at a mutually convenient time in a local café. The interviews began with the researcher ensuring that the participants were clear about the intentions of the study. The interview transcripts were made available to the students and the teachers on request.

A semi-structured interview technique allowed the researcher to redirect, probe for clarification and ask questions appropriate to “respondent’s knowledge, involvement and status” (Merriam 1988, p. 145). It also provided participants with the opportunity to describe their learning processes in detail and the researcher an opportunity to gain deeper insight into the individual’s experiences and the meaning of these experiences (De Groot 2002). The benefits of the researcher being one of the teachers included familiarity with the content and the ability to process the responses to keep the interview flowing.

The researcher had the opportunity to build rapport with the participants prior to commencement of the interviews. A good level of rapport and empathy was evident from the depth of information gained from each participant. In addition, the participants’ recall of the activity was surprisingly good and this was attributed to the fact that the task concerned a personal career goal. The researcher maintained a focus on the interview questions to avoid any undue influence and triangulated interview data with data from the teacher interviews. Teacher interviews were conducted at the end of the semester after repeated contact with the students and the aim of this triangulation was to complement the student data and to avoid bias (Miles & Huberman, 1994). The researcher, also one of the teachers, collaborated with a second teacher as this was a team teach environment. Interview transcripts were shown to another researcher and discussed with colleagues to check that the researcher was not being misled.

Results and findings have been reported robustly with direct quotes from the participants and their teachers to ensure accurate representation and to illustrate specific points. The researcher’s interpretations have been linked to previous research and peer debriefing with colleagues not involved in the study was performed intermittently to ensure credibility of interpretations.

3.6 Ethical considerations

Prior to the commencement of data collection, approval for inviting student participants in this study was gained from the college's Managing Director, the Manager of the Business and Management Portfolio and the participants' teachers. In addition Ethical Approval for Research Involving Humans was gained from the University's Human Research Ethics Committee. (See Appendices 5 & 9)

The participants and their teachers were given an information sheet and consent form and told that they were entitled to withdraw at any time. (See Appendices 6-8) The information sheet clearly stated the nature of the research and its purpose. It also stated that the information was to be collected anonymously to protect the identity of the participant and the teachers and to ensure that none of the information collected would embarrass or harm them. The participants were also informed verbally of the nature of the research and its purpose. Participants who agreed to become involved in the study were asked to sign the consent form. Participants were assured that information published as a result of this study would not be traceable to any individual.

The researcher sought permission from students and their teachers to digitally record the interviews. The digital recordings were deleted upon transcription. All other soft and hard data have been referenced and stored in a durable manner for a minimum period of at least 5 years from the date of publication. Data encryption will ensure security of confidential data that might be accessible through computer networks. The data will not be used for any purpose other than that agreed to by the participants.

3.7 Summary

In summary, this study, concerned with understanding the self-regulation characteristics of a group of eight students from a Certificate IV in Business Administration at a TAFE college, adopted a phenomenological approach. Interviews with the participants and their teachers were undertaken after the submission of a written report. The interviews were recorded and transcribed. The raw data were initially coded using broad categories from Pintrich's theoretical framework. Data were then reduced to clusters of statements and placed into six major categories. Quality control was achieved through a combination of data from

the participant interviews, the teacher interviews and the researcher's interpretations that have been linked to previous research and reviewed through peer debriefing.

4 RESULTS

4.1 Overview

This chapter presents the results of the case by case analysis and cross-case analysis, followed by a summary. Results from participant interviews have been divided into six categories: existing knowledge awareness; organising information; planning and writing; monitoring writing progress; regulation of behaviour; reaction and reflection. Eighteen sub-categories emerged from the data (see Table 1). Results from teacher interviews have been sorted into four of the six major categories and five subcategories that emerged from the data (See Table 2).

TABLE 1 – PARTICIPANT CATEGORIES AND SUBCATEGORIES

Categories	Sub-Categories
1.0 Existing knowledge awareness	1.1 School/work/other 1.2 Self-efficacy
2.0 Organising information	2.1 Information gathering process 2.2 Sorting and selecting 2.3 Self-awareness
3.0 Planning and writing	3.1 Writing sequence 3.2 Prior knowledge application 3.3 Task analysis 3.4 Self-awareness
4.0 Monitoring writing progress	4.1 Task adherence 4.2 Revision strategy 4.3 Self-awareness
5.0 Regulation of behaviour	5.1 Help seeking 5.2 Time management 5.3 Assessment preparation environment 5.4 Self-awareness
6.0 Reaction and reflection	6.1 Process 6.2 Outcome

TABLE 2 – TEACHER CATEGORIES AND SUB-CATEGORIES

Categories	Sub-Categories
2.0 Organising	
3.0 Planning	
4.0 Monitoring writing progress	4.1 Task adherence 4.2 Proofreading
5.0 Regulation of behaviour	5.1 Help seeking 5.2 Time management 5.3 Self-awareness perception, feedback response, effort perception

Clustered statements from the interviews with the students and their teachers are labelled in brackets by subcategory and brief descriptor in the case by case analysis (see Appendix 4: Summary of Descriptors Case by Case).

Because the aim of this research was to understand self-regulation from the participants' and teachers' points of view, numerous quotes have been included in both case by case and cross-case results; these results have been written up in narrative form. Pseudonyms have been used to protect the identity of the participants.

4.2 Case By Case Results

4.2.1 Case 1: Angela

This 23-year-old student had completed Year 12 of schooling. She had also completed a Certificate IV in Beauty Therapy at a TAFE college. She was working part-time as an Administrative Assistant.

1.0 Existing knowledge awareness

This student was able to make a connection between her existing knowledge of the assessment content and her workplace. “I was able to link a lot of it to my current job in HR.” [1.1, 1.2 WORK SELF-EFFICACY JUDGEMENT: CONTENT]. She added that this was easier than forming new networks. She believed that she was not well equipped with report writing skills.

2.0 Organising information

When asked how she went about organising the information, she stated: “I put it into chronological order, where I wanted to put it in the report”, and determined how useful the information was before including it. [2.2 SORTING AND SELECTING: ARRANGES IN ORDER AND ASSESSES RELEVANCE]. She felt her information gathering process for this submission was “a little bit messy” and that sorting was “really hard.” [2.3 SELF-AWARENESS: ORGANISING].

3.0 Planning and writing

When asked about the planning and writing of the report she said that she did not know how to plan the report and set it out with an introduction, body and conclusion because “that’s how I thought things normally go.” [3.2 PRIOR KNOWLEDGE APPLICATION].

She described her writing process: “I started off with what the whole assessment was about, the job skills and why I chose it. The next part would have been what sort of helped me to fulfil that criteria, so that would be my networks.” [3.1 WRITING SEQUENCE].

4.0 Monitoring writing progress

The student used the following method to monitor and adjust her writing: “I found that as I moved further into the body, I had to go back and change a little bit of what I said at the beginning because it didn’t quite match. Like it didn’t go from one point straight into another, it sort of jumped from place to place”. [4.3 SELF-AWARENESS: WRITING ADJUSTMENT].

She made sure she was on track using the assessment guide. “I just tried to understand as much as I could from the assessment sheet.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

She explained her revision strategy: “Before I go to save everything, I’d proofread it. At the end when the whole project was done I’d proofread it again.” When revising her work she looked for “stuff that repeats itself... just making sure it flows”. [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, REPETITION, FLOW].

5.0 Regulation of behaviour

Angela stated that did she not seek any additional help from her teachers for this assessment. [5.1 HELP SEEKING: NEGATIVE].

She said she prepared her assessment at home in her room because “It was quiet, no disruption. All facilities were there ... my computer, comfort.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]. She described how she managed her time for this assessment. “It was on-going; I’d spend a few hours on it, probably about an hour a day.” [5.2 TIME MANAGEMENT: SPACED OVER TIME]. She added “it was relatively easy because I did it in the space of a week.” [5.4 SELF-AWARENESS: TIME MANAGEMENT]. However, she also commented that she needed to balance her time with other assessments “It was hard because it was given at the same time at the group one, so you sort of had to balance it.” [5.4 SELF-AWARENESS: COMPETING INTERESTS].

6.0 Reaction and reflection

Angela spoke about her feelings in relation to the task and made the following comments: “At first I actually thought it was a little bit vague and didn’t know where to start, but once I got going it was easier.”

“It’s difficult knowing how to write. I had no idea what was expected. I didn’t know how I was supposed to outlay all this material to make it presentable and understandable.” When asked to reflect on the task, she felt the report writing would have been a lot easier having the background she had now. [6.1 PROCESS: REPORT WRITING].

She also added “my information gathering process was a little bit messy, sorting was really hard”, and that next time she would be “better organised to make the whole process a lot faster.” [6.1 PROCESS: ORGANISING].

Teachers’ comments

Overall, both teachers agreed that Angela’s level of planning, organising and proofreading over the 20 weeks was excellent. [2.0, 3.0, 4.2 ORGANISING, PLANNING AND PROOFREADING: EXCELLENT]. Her ability to follow assessment instructions was also excellent. [4.1 TASK ADHERENCE: EXCELLENT]. They felt she generally put sufficient effort into her submissions and sometimes it was over and above what was required. [5.3 EFFORT PERCEPTION: SUFFICIENT]. However, one teacher stated “she suffered from illness and absence”, and this had affected her consistency in getting her assessments in on time. [5.2 TIME MANAGEMENT: INCONSISTENT].

Her teachers stated that she was not inclined to seek assistance from them independently and only one of her teachers recalled being approached. [5.1 HELP SEEKING: OCCASIONAL]. However, both teachers agreed that Angela demonstrated a positive response to any feedback she received from them. [5.3 FEEDBACK RESPONSE: POSITIVE WITH ACTION].

One of the teachers commented that Angela was generally “very self-aware” and confident in what she did. He elaborated by saying that she was able to “make an assumption that she had put enough effort in to justify a successful result, in other words, competence.” [5.3 SELF-AWARENESS PERCEPTION: ACCURATE].

4.2.2 Case 2: Barbara

This 22-year-old student had completed Year 12 of schooling. She had also completed a Certificate II in Conservation and Land Management at a TAFE college by distance education.

1.0 Existing knowledge awareness

This student was able to make connections between the networks she had created in her previous work as a Landcare Assistant. She made the following judgement: “I thought: I can do this, because I have had previous experience and exposure to networking. I knew I could contact them.” [1.1, 1.2 WORK SELF-EFFICACY JUDGEMENT: CONTENT].

She felt she lacked the procedural knowledge and skills for the report writing: “I hadn’t done reports since I was in Year 12 and that was 05, and I wasn’t very good, I never really understood the concept of report writing, so I found that quite difficult.”

2.0 Organising information

This student explained how she tracked information electronically and through note taking. “When I was on the computer I would copy and paste the website and write it down as I went. I just took notes on what questions I asked.” [2.1 INFORMATION GATHERING PROCESS: ELECTRONIC AND NOTE TAKING].

She claimed that she included all information she gathered. “I put everything in my report. I put them all into a barrel and talked about them all.” [2.2 SORTING AND SELECTING: INCLUDES ALL INFORMATION]. She added that she was “not very good with organising.” [2.3 SELF-AWARENESS: ORGANISING].

3.0 Planning and Writing

When asked about the planning and writing of the report she described her approach. “I like to write it out so I can see the structure and I can look at it as I go. I prefer to see it in front of me as a written document and then add bits and take bits out.” [3.4 SELF-AWARENESS: LEARNING STYLE].

This student also described how she sequenced her writing: “I based my report on having couple of paragraphs for my introduction and couple of different subheadings for my body and then conclusion and recommendations.” [3.1 WRITING SEQUENCE].

4.0 Monitoring writing progress

She used her textbook and class notes to monitor her writing: “I looked into the book that we got for class. They said we did need a conclusion, body and recommendations, so I looked at ones that had that and chose to write in that style.” [4.1 TASK ADHERENCE: TEXT BOOK]. “I sort of went back on my previous notes that we’d done in class”. [4.1 TASK ADHERENCE: CLASS NOTES].

She described her revision strategy: “I always re-read [to see if] what I have is appropriate and going in the right direction. Whether it makes sense. I usually try and look over it once I’ve written it up and I am happy with it.” [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, MAKES SENSE].

5.0 Regulation of behaviour

Barbara sought help with the report from her teachers as well as a teacher from a different class.

I did ask the teacher how best to set out my report. [5.1 HELP SEEKING: TEACHER]. I usually try and get another person to have a look at it (report) to see if they understand. The teacher within my computing class was happy to do it. She fixed up my grammar and my spelling. [5.1 HELP SEEKING: TEACHER FROM DIFFERENT CLASS].

She said she prepared her assessment in the TAFE library because “it was quiet, everything is there, your resources, computers and the librarians and you could print it out too.” She said she was “mainly in the library for writing up the final copy of the report.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: COLLEGE LIBRARY JUSTIFICATION].

She commented, “I was running a bit late with this submission so I came to TAFE early. I was in the library, because I knew if I was home, I’d be distracted.” [5.4 SELF-AWARENESS: TIME MANAGEMENT].

6.0 Reaction and reflection

Barbara made the following evaluation on her performance on this task: “I probably need to be more to the point and not waffle.” [6.1 PROCESS: REPORT WRITING].

I’d probably try and get more information than what I did. I mainly used one book and the internet. It would have been nice to get a more book-based report. Use different resources so you’ve got more information, combine everyone’s ideas and then make it your own. [6.1 PROCESS: RESOURCE SELECTION].

Teachers’ comments

Both teachers felt that this student’s level of planning and organising was poor with “flashes of good [work] but not consistent”. One of the teachers stated that her reports included “extraneous matter, she did not question relevance, found something that she thought looked good, copied it and put it in”. At the same time she “demonstrated flashes of being incredibly able but wasn’t consistent”. [2.0, 3.0 PLANNING/ORGANISING: INCONSISTENT].

One teacher stated that Barbara “could not get the spelling right even when the teacher corrected it for her. She could have looked it up in the dictionary”. The other teacher added that “perhaps she can’t read the word or letter...a cognitive block.” [4.2 PROOFREADING: POOR].

Both teachers agreed that her ability to follow assessment instructions was marginal. One of the teachers also commented that she did not pass two units of competency [4.1 TASK ADHERENCE: MARGINAL]. Both teachers agreed that although she had put a fair amount of effort into her assessments, “when it came to feedback, she wasn’t prepared to put in the effort to pass.” [5.3 EFFORT PERCEPTION: SUFFICIENT]; [5.3 FEEDBACK RESPONSE: NEGATIVE]. The teachers agreed that she consistently sought feedback when experiencing difficulty but that a “learning difficulty may have impacted.” [5.1 HELP SEEKING: CONSISTENT] Overall, she frequently got her assessments in on time [5.2 TIME MANAGEMENT: CONSISTENT].

According to one of her teachers the student did demonstrate some self-awareness and said “occasionally she would admit ‘I don’t think I’ve done this well’ and ‘I don’t think I’ve answered that question’, or ‘I think I’ve given you way too much, I haven’t been able to reduce it’. One of the teachers made the following comment: “She said that she was terrible at writing but she wasn’t aware to the point of trying to do something about it.”

The teachers agreed that this student had a high level of verbal skills, but after a while they realised that her verbal responses “were not that informative”. [5.3 SELF-AWARENESS PERCEPTION: ACCURATE UNABLE TO ADJUST].

Both teachers agreed that this student had a learning difficulty of some kind, possibly undiagnosed dyslexia. One teacher stated, “if she didn’t have that learning difficulty she probably would be a good learner.”

4.2.3 Case 3: Colin

This 18-year-old student had completed Year 12 of schooling. It was his first time at a TAFE college.

1.0 Existing knowledge awareness

This student was able to make a link between this task and his existing knowledge of report writing from school. He stated “we did it fairly extensively in school... they

did teach us a lot of report writing in English. I knew how to write a report. I could do that.” [1.1, 1.2 SCHOOL SELF-EFFICACY JUDGEMENT: REPORT WRITING]. He could not relate to the report content.

2.0 Organising information

This student explained how he organised the information for this assessment: “I linked information into the questions on the assessment sheet and used the ones (information) that were relevant to the assessment.” [2.2 SORTING AND SELECTING: ASSESSES RELEVANCE].

3.0 Planning and writing

He described his approach to the task: “I looked at what job I wanted to do and what kind of studies would get me there. I looked at how that information would help me in placing it into the job that I wanted to do.” [3.3 TASK ANALYSIS].

When asked how he had planned the report, the student hesitated and then responded, “I just went with what knowledge I had on report writing. So just basic cover page, contents and straight into the body of the report.” [3.2 PRIOR KNOWLEDGE APPLICATION].

4.0 Monitoring writing progress

The student described how he used the assessment guide for task adherence. “I kept looking back at the assessment questions to see if I had answered them. I kept looking back at the assessment sheet to see if I could match the criteria.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

He described his revision strategy as follows: “After I finish it I just reread it again to see if it makes sense and see that I have answered the questions.” He added “I look back at it and read it through again to see if the spelling and grammar and things like that were correct.” [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, MAKES SENSE, ANSWERS QUESTIONS, GRAMMAR, SPELLING]. “Mainly I just use waffle. I try to extend the words and drag it on a bit.” [4.3 SELF-AWARENESS: WRITING SKILLS].

5.0 Regulation of behaviour

Colin stated that he did not seek additional help from the teachers but got some help from home. “I asked my mum about the contacts so that would help me with future jobs.” [5.1 HELP SEEKING: HOME CONTENT]. He prepared his assessment at home where there were fewer distractions. “I just do it in my room with my computer there. It’s quieter and more comfortable. I can’t really do it at TAFE, it’s too noisy and I don’t really feel like doing it at TAFE.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION].

When asked about his time allocation to this assessment he said: “I just did it when I had some free time. I spread it out over time, I write one bit then maybe the next day I’ll think of something else and just add it in.” [5.2 TIME MANAGEMENT: SPACED OVER TIME]. I did get it in on time but it was kind of left until the last minute.” [5.4 SELF-AWARENESS: TIME MANAGEMENT].

He also spoke about the challenges of competing interests: “They did give us three assessments at the same time, so I had to focus on other assessments. I am doing a part-time Japanese course, Cert IV as well. I have to do assessments for that.” [5.4 SELF-AWARENESS: COMPETING INTERESTS].

6.0 Reaction and reflection

Colin’s reflective comments were predominantly related to his time management:

This task was kind of confusing because I didn’t get that much time to contact other contacts for my future job. If I had more time I would have contacted someone that actually works in the job I wanted. I never got any information directly to the job that I wanted to do. I didn’t get that much time to contact other contacts for my future job. [6.1 PROCESS: TIME MANAGEMENT EVALUATION].

He added: “For this assessment they gave me a competent.” [6.2 OUTCOME: RESULT SATISFACTION].

Teachers' comments

The teachers felt that this student's level of planning and organising was "not as good as it could have been." One teacher commented that he was "understating himself the whole time. He was a classic case of just doing enough. He was lazy." His proofreading of assessments before submission was deemed to be poor. [2.0, 3.0, 4.2 PLANNING ORGANISING PROOFREADING: POOR].

The teachers also felt that he did not really seek their assistance when having difficulty. They found his ability to follow assessment instructions was marginal but occasionally good. [5.1 HELPSEEKING: NEGATIVE; 4.1 TASK ADHERENCE: INCONSISTENT].

One of the teachers commented:

He did enough in all of the dimensions that I can think of to get through; he didn't want to put his head out and get seen. We consider him an intelligent and capable learner. He knew what levels that he could take stuff, to just be right. He did enough to pass but sometimes he didn't quite. [5.3 EFFORT PERCEPTION: SUFFICIENT/INCONSISTENT].

They stated that his response to feedback was excellent when he realised "he couldn't just stuff around". [5.3 RESPONSE TO FEEDBACK: POSITIVE WITH ACTION] He was always on time with his assessments. [5.2 TIME MANAGEMENT: CONSISTENT].

Initially the teachers were unsure how to respond to a question about his awareness of how he had done. One teacher made a comment that "there was a bit of ambivalence, he works well when interested and motivated." The teacher then elaborated "It was a hands off self-assurance attitude that he had at times. 'I've done my bit.' It's a commitment thing I suppose". He also added "I think he knew what he was doing, he did what I think was the best flow chart I've seen for a person of his age and experience." [5.3 SELF-AWARENESS PERCEPTION: ACCURATE].

4.2.4 Case 4: Donna

This 18-year-old student had completed Year 12 of schooling. It was her first time at a TAFE college and she worked part-time in a newsagency.

1.0 Existing knowledge awareness

This student was able to make a link between this task and her existing knowledge of the “general report layout” from school. “I was used to doing essays. This was much easier. ...you just have a heading and you need to just write what the heading is about.” [1.1 1.2 SCHOOL: SELF-EFFICACY JUDGEMENT: REPORT WRITING].

2.0 Organising information

She tracked the information through note taking. “I had to make the database from notes of what they said.” [2.1 INFORMATION GATHERING PROCESS: NOTETAKING AND ELECTRONIC]. She stated that she included all information she gathered “I just put it in and made up another heading for it just to go in as extra.” [2.2 SORTING AND SELECTING: INCLUDES ALL INFORMATION]

3.0 Planning and writing

When asked about the writing of the report she responded: “I drafted it in a piece of paper, like the heading and dot points of what goes under each heading. I start from the introduction and follow through.” [3.1 WRITING SEQUENCE].

For the content of the report she stated that she had done a similar assignment at school: “I didn’t really have to keep anything for that because we learnt about like the outline of skills in high school in our work and business class.” [3.2 PRIOR KNOWLEDGE APPLICATION].

4.0 Monitoring writing progress

She described how she used the assessment guide to monitor task adherence. “I just follow the assessment layout, like the bits we had to include and that’s all. I just had to keep going back to the assessment layout and making sure that what’s required was being like written.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE]. She

checked her writing for “mistakes, if it makes sense, if it’s not going into another direction, if it’s like to the point of the question. At the end after I’ve written the whole assessment...” [4.2 REVISION STRATEGY: PROOFREADS AT END, MAKES SENSE].

5.0 Regulation of behaviour

Donna said she sought help from a peer, and stated that she would only ask the teacher “if I didn’t understand something and if Sandy didn’t understand it.”

“Towards the end I checked with Sandy to see if she was doing the same thing that I should have been doing. I did what I thought was right and asked her if it is the same.” [5.1 HELP SEEKING: PEER]. She also sought help from her mother “...because she used to do typing and stuff”. [5.1 HELP SEEKING: HOME].

She prepared her assessment at home. “I do it usually at home in the kitchen away from the TV where I don’t get distracted.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION].

When asked about time allocation for this assessment she stated: “I did what I could in class.” [5.2 TIME MANAGEMENT: IN CLASS]. She explained her study schedule preference:

Usually I leave it till the last couple of days before the assessment is due. That way I am more motivated. I know I have to get it done because I know I don’t have that much time left so I have to get it all done in one day. If I’ve got time, if it’s not due the next day, sometimes I leave it. [5.4 SELF-AWARENESS: CRAMMING].

6.0 Reaction and reflection

Her reflection was on her time management and the outcome: “I would probably change it (time management), because doing it a couple of days before makes you stress a lot while you’re doing it. [6.1 PROCESS: TIME MANAGEMENT].

Then again if I wasn't stressing so much I probably wouldn't have got it done as well as when I am a bit stressed out in class with a lot of things coming into your head like what you should be doing. If I did it at the beginning, if we got it today and I did it tomorrow then I'd just be doing it not very well. I'm not like I have to get this done because it's due next day kind of thing. [6.2 OUTCOME: EFFORT].

Teachers' comments

The teachers felt that Donna's planning and organising of information was good. One of the teachers felt her proofreading was good; however, the other disagreed: "I believe she did proofread it but her sentences were very long and repetitive. Reading her work, she missed a lot of stuff but I do think she probably read it." [2.0, 3.0 PLANNING ORGANISING: GOOD]; [4.2 PROOFREADING: INCONSISTENT].

Her ability to follow assessment guides was debated between the two teachers. One teacher commented that "When I marked her work, I don't think she followed the guides because I often had to say to her, you haven't done this or this." For this assessment it was felt that she did follow the assessment guide. One of the teachers added, "This was a fairly straightforward assessment to follow." [4.1 TASK ADHERENCE: INCONSISTENT].

The teachers agreed that this student was consistent in that "she came to class and did what she had to do, worked hard but didn't go much wider than that. Her goal seemed to be to be to pass... she gave more than just enough to pass." [5.3 EFFORT PERCEPTION: SUFFICIENT].

Her overall response to feedback was good. [5.3 RESPONSE TO FEEDBACK: POSITIVE WITH ACTION]. She mostly got her assessments in on time. [5.2 TIME MANAGEMENT: CONSISTENT]. She rarely sought help. [5.1 HELPSEEKING: OCCASIONAL]. She demonstrated awareness of how she had done most of the time. [5.3 SELF- AWARENESS PERCEPTION: ACCURATE MOST OF THE TIME].

4.2.5 Case 5: Eliza

This 22-year-old international student was from Switzerland, and English was not her first language. This was her first time at a TAFE college. In Switzerland she had completed six years of primary school, and after that had done three years of what she thought was the equivalent of high school. She then worked for six years in a government apprenticeship in Switzerland, and was in Australia for what she called an “exchange year”.

1.0 Existing knowledge awareness

This student was able to make a link between her existing knowledge of report writing and this task, making the following judgement: “the writing thing was a bit easier for me.” [1.1, 1.2 OTHER SELF-EFFICACY JUDGEMENT: REPORT WRITING]. The student believed that she had no prior knowledge of the content.

2.0 Organising information

When asked about a system for collecting and storing information, she stated that she kept a log of her contacts through e-mail. She researched the job skills on the internet and stated “I put them in the report, just a draft report and then I just always worked on that draft until I finished it.” [2.1 INFORMATION GATHERING PROCESS: ELECTRONIC].

3.0 Planning and writing

When asked about the planning and writing of the report, she described how she used her existing knowledge. “I just remembered what I had done in the past, that I have to have a title page and table of contents....” [3.2 PRIOR KNOWLEDGE APPLICATION].

She said “I thought about the job I wanted to do in the future and then I started writing.” [3.3 TASK ANALYSIS]. “I started with the bit more easier things for me, like the Title Page and maybe with the headings then.” [3.1 WRITING SEQUENCE].

4.0 Monitoring writing progress

She explained how she monitored her writing. “In the beginning I checked this (assessment) as well as the marking guide looking for what I have to do to get ticked off. When I wrote a paragraph I checked with this paper (assessment) if I was doing it right or not.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

She explained how she monitored her written expression. “While I’m writing I have the spell check in there so I correct those mistakes straight away. I leave it for a day or so when I’ve finished, then I read it again.” [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, SPELLING].

5.0 Regulation of behaviour

For this assessment Eliza said: “My boyfriend read it and he’s the only other person. I wanted to be sure that I was doing the right thing.” [5.1 HELP SEEKING: HOME.] She could not recall approaching the teachers for help in relation to this assessment although she explained that she read assessment tasks “again and again and I had to ask the teacher if I was unsure.”

She prepared this assessment “at home most of the time except for the time we could spend at school.” She chose this environment because “It’s a quiet environment and I am usually at home alone, my boyfriend was working and I had all the space I needed.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION].

She completed the report over two weeks and said she did a little bit “maybe every three or four days.” [5.2 TIME MANAGEMENT: SPACED OVER TIME]. When asked how she managed her time she stated:

I had to wait for all the e-mails to be responded to and meanwhile I was writing about the skills. I started early to write e-mails because I was worried that people wouldn’t respond to me quickly and I think I wasn’t stressed in the end. [5.4 SELF-AWARENESS: TIME MANAGEMENT].

6.0 Reaction and reflection

When asked to reflect on this assessment she said that she did not “think” she would do anything differently next time.” [6.2 OUTCOME: RESULT SATISFACTION].

Teachers’ comments

Overall, both teachers agreed that her level of planning and organising demonstrated in her written submissions over the 20 weeks was good. [2.0, 3.0 PLANNING AND ORGANISING GOOD]. Her ability to follow assessment instructions was good and sometimes excellent. [4.1 TASK ADHERENCE: GOOD/EXCELLENT].

The teachers commented that the effort she put into assessments was good, often excellent, and sometimes it was “over and above” that required. [5.3 EFFORT PERCEPTION: GOOD/EXCELLENT/OVER AND ABOVE]. She mostly got her assessment in on time. [5.2 TIME MANAGEMENT: CONSISTENT]. The teachers commented that this student had “self-regulated well to accommodate a time away in Switzerland during semester.”

Her response to feedback was good to excellent and she was generally willing to seek assistance independently most of the time. [5.3 RESPONSE TO FEEDBACK: GOOD/EXCELLENT; 5.1 HELP SEEKING: MOST OF THE TIME]. Overall the teachers felt that this student demonstrated accurate awareness of how she had done most of the time [5.3 SELF-AWARENESS PERCEPTION: ACCURATE MOST OF THE TIME].

The teachers had difficulty in commenting on the proofreading skills of this student, for whom English was not a first language. One teacher commented that “she probably didn’t have the ability to proofread her work because her English wasn’t strong enough.” She also commented that this student was sent to get help with her written English so it was “difficult to judge her proofreading. The fact that she went there off her own bat showed that she wanted to proofread, she just needed some assistance.” [4.2 PROOFREADING: UNABLE TO COMMENT]. The other teacher added:

It is a tricky one because international students don't always know what they're proofreading for. The difference is that this is what they are also learning at the same time so we may not see evidence of proofreading but in fact they may have gone over it again and again.

4.2.6 Case 6: Frank

This 23-year-old student had completed Year 12 of schooling. He had commenced a Certificate IV in Multimedia at a TAFE college but withdrew after a month. He said this was because, "it was nothing like I thought it would be." He worked part-time at a supermarket.

1.0 Existing knowledge awareness

This student was able to make links between the task content and his existing knowledge and made the following comment: "Most of the skills I already know. I find it really easy to talk to people." [1.1, 1.2 OTHER SELF-EFFICACY JUDGEMENT: CONTENT]. He spoke about his existing writing skills from school and commented: "I did senior English. There weren't any reports, just assessments", and added "writing reports isn't one of my strong points."

2.0 Organising information

He described his information gathering strategy: "I just jotted notes down at the time and then I just used that for my assessment later. I had a little Word Document and I just kind of put notes down as I went." [2.1 INFORMATION GATHERING PROCESS: ELECTRONIC AND NOTE TAKING]. This student added, "I'd rather do it on computer because it is so much easier just to bring it home. I have a Word document with class notes [for] this date... It's just so much easier to keep track of." [2.3 SELF-AWARENESS: ORGANISING].

He said he sorted the information "by people and I just had to try and pick out the important bits." [2.2 SORTING AND SELECTING: ARRANGES IN ORDER AND ASSESSES RELEVANCE].

3.0 Planning and writing

For the planning of this report he explained:

The first thing I did was getting all the skills and just putting that down first and typing up the job. I usually just get all the stuff down and then I just smooth it out. I like to go in order, usually I like things structured. I try to do it in sections. [3.1 WRITING SEQUENCE;] [3.4 SELF AWARENESS: PLANNING AND WRITING].

4.0 Monitoring writing progress

Initially, at the interview, he struggled to remember how he monitored and adjusted his writing but in the end stated: “I had all notes about one thing on a different page and then I changed all that. I think I ended up like changing the whole introduction. I did it first before I got the information.” [4.3 SELF AWARENESS: WRITING ADJUSTMENT]. To check that he was on task, “I usually just read the assessment a few times.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

He described his method for proofreading and revising his work: “Usually [check it] as I go, like both really [and at the end] so it flows.” [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, FLOW].

He added: “I am pretty good with spelling and grammar. I’m a person that can over-check things. Sometimes it can be a good thing or a bad thing. I just like to make sure everything is perfect.” [4.3 SELF-AWARENESS: WRITING AND REVISION SKILLS].

Whilst writing he said he thought about “which of these (skills) I would be good at and which I’d be bad at just based on what people told me.” [4.3 SELF-AWARENESS: TASK REFLECTION].

5.0 Regulation of behaviour

Frank said he sought information for the content of this report from his family. Although he stated no-one in the class actually helped him with this submission he did collaborate with his peers when “trying to figure what was the best way to do

[the chart]”. He stated that he did not seek any help from the teachers because “This assessment was mostly pretty straightforward.” [5.1 HELP SEEKING: HOME/PEERS].

He prepared his assessment on his home computer because “it was the most convenient place.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]. He explained how he allocated his time for this task:

Whenever I had free time I just tried to do a bit of it. Most of this was done a few days beforehand because of work. I work three days and am at TAFE three days, I only get Sundays to do assessments. I ended up cramming a lot of it in on the Monday beforehand. [5.2 TIME MANAGEMENT: FREE TIME]; [5.4 SELF-AWARENESS: CRAMMING/COMPETING INTERESTS]

6.0 Reaction and reflection

When asked to reflect on this assessment, he stated that he was generally “pretty happy.” [6.2 OUTCOME: RESULT SATISFACTION]. He made the following statement about the assessments administered in class:

Often with all the assessments so far there have been quite a few times when I’ve had to go back to Jack and Jill and ask for advice. I am a person who likes to know exactly what to do before I do it. I don’t like guessing. I’m usually a perfectionist. [6.1 PROCESS: HELP SEEKING].

Teachers’ comments

Overall both teachers agreed that his submissions over the 20 weeks demonstrated a good to excellent level of planning and organising of information. However, on a personal level they felt that he had very poor organisational skills. One of the teachers stated that he was an “incredible fusser, he was disjointed.” The other teacher explained: “his process wasn’t good but his products were good to excellent. The content was good. The way it was structured was also good.” [2.0, 3.0 PLANNING AND ORGANISING GOOD TO EXCELLENT].

His level of proofreading before submission was excellent. One teacher stated that “he did well in assessments because he was meticulous.” [4.2 PROOFREADING EXCELLENT]. Both teachers rated the amount of effort he was prepared to put into assessments as over and above that required. [5.3 EFFORT PERCEPTION: OVER AND ABOVE].

The teachers were unsure how to rate his ability to follow assessment instructions, and one made the comment that he did follow instructions eventually, “once he had exhausted all debate with teachers.” [4.1 TASK ADHERENCE: UNABLE TO COMMENT]. The teacher went on to explain:

He had a lot of questions to ask about them because he was so afraid that he didn’t understand them, he almost put up a block and denied that he could understand them. He asked many questions about the instructions. He told us he disagreed at times with the way the assessments were worded. He suffered from high levels of self doubt. He challenged us from the point of view of his own self-doubt: “you should make it easier, you should make it clearer.” His own admission to both of us was that he would function better in a more structured environment. [5.1 HELP-SEEKING: CONSISTENTLY].

According to his teachers, he sought feedback and responded well to any feedback they gave him. They said that he was “intense” when seeking feedback and the teachers felt that this related back to his “self-doubt”. [5.3 RESPONSE TO FEEDBACK: POSITIVE].

One teacher stated “he frequently got into some stress with time management but mostly got his assessments in on time. It took him three times longer than anyone else. He couldn’t sort himself out. He was all over the place.” [5.2 TIME MANAGEMENT: POOR]. The teachers claimed that this student’s self-awareness was inaccurate, which they attributed to his “very intense self doubt”. [5.3 SELF AWARENESS PERCEPTION: INACCURATE].

4.2.7 Case 7: Gary

This 18-year-old international student had finished high school and did a year of journalism at university, but withdrew because he did not like it. He had travelled widely with his family. Originally from Iran, he had spent the past four-and-a-half years in Iowa.

1.0 Existing knowledge awareness

This student stated that he was “fine” with the report writing because he had done reports before in high school. “I’d done science reports and geographic art reports.” [1.1, 1.2 SCHOOL SELF-EFFICACY JUDGEMENT: REPORT WRITING]. In addition, he was able to make a connection between this task and a task he had completed for university entry. “When I had to apply for my university for Journalism in Iowa they kind of had a similar thing.” [1.1 OTHER: CONTENT].

2.0 Organising information

He organised the information he had gathered in an Excel spreadsheet. In the spreadsheet he explained that he recorded his contact’s “name and what they did, occupation and how they could help me... to keep track of what I was collecting but I used that for the assessment too.” [2.1 INFORMATION GATHERING PROCESS: ELECTRONIC]. He added: “I had to ditch some of it but what I was putting in my spreadsheet was all I wanted, the ones I was going to ditch anyway I ditched in the first place.” [2.2 SORTING AND SELECTING: RELEVANCE].

3.0 Planning and writing

He described the writing of his report as follows: “I outlined what I would put on the first page and the first paragraph and the next page in writing. On my computer I’ll start writing my introduction paragraph and come up with a thesis.” When asked to clarify what he meant by “thesis”, he explained: “At school I was taught to start with a thesis. It’s kind of a sentence that sums up what you’re going to write about and you usually put it at the end of the introduction.” [3.1 WRITING SEQUENCE].

He also explained how he applied the knowledge he had gained from a previous task he had done for university entrance: “From that I kind of knew what I wanted, what

skills I wanted. I kind of used that information that I'd thought of a long time ago.” He explained how he used a writing strategy that he was taught at school: “When you have your thesis in the next paragraph you'd start with a claim and you'd analyse the data and conclude the data and you would do that for every paragraph.” [3.2 PRIOR KNOWLEDGE APPLICATION].

4.0 Monitoring writing progress

To make sure that he was adhering to the task, he used the assessment guide. “[I do it] just by reading it again and analysing, making sure I am following what I have to do in the assessment.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

He went on to explain his process for revising his written work:

I get stuck a lot with the writing so I read it a lot, read whatever I've written a lot, and I analyse as I read. I come up with ideas for the next paragraph or the next sentence. [4.3 SELF-AWARENESS: WRITING SKILLS]. After I am done with the entire thing, I revise it again to see if there are any grammar errors and check the vocabulary. [4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, GRAMMAR, VOCABULARY].

5.0 Regulation of behaviour

Gary said that he did not seek any help from teachers or peers. “Sometimes I was confused but nothing I couldn't figure out by myself.” He got help from home — his father: “I got most of my personal contacts from Dad and yeah I think it just helped me gather information.” [5.0 HELP SEEKING: HOME ASSESSMENT CONTENT].

He prepared the task in his room at home because “it helps me to concentrate to be alone, in a secluded environment.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]. He stated, “I didn't use any timeline for it, I just did my work whenever I felt like it and if I got bored I'd take a break.” [5.2 TIME MANAGEMENT: WHEN FEELS LIKE IT].

6.0 Reflection and reaction

When asked to reflect on this assessment task, he made the following two comments:

“I think I was happy with what I did and how the teachers gave us instruction regarding the assessment. I think I could have put a bit more effort into it, but that’s just a personal thing though.” [6.1 PROCESS: TEACHER INSTRUCTION SATISFACTION; 6.2 OUTCOME: EFFORT EVALUATION].

Teachers’ comments

Overall both teachers agreed that his level of planning and organising information was marginal to good, and that “he was not unintelligent.” One of the teachers commented “in some instances when he fully understood the task at hand he responded well. He wasn’t consistent.” [2.0, 3.0 PLANNING AND ORGANISING: INCONSISTENT]. Overall they felt his level of proofreading was poor. [4.2 PROOFREADING: POOR].

The teachers felt that the effort he put into his submissions was minimal, sometimes just enough to pass. One of the teachers said “he didn’t quite pass some.” [5.3 EFFORT PERCEPTION MINIMAL/ENOUGH TO PASS]. His ability to follow assessment instructions was marginal and “he wasn’t consistent”. [4.1 TASK ADHERENCE: INCONSISTENT]. He occasionally sought assistance from the teachers when having difficulty. His response to feedback was good. [5.1 HELP-SEEKING OCCASIONAL; 5.3 FEEDBACK RESPONSE: POSITIVE WITH ACTION]. He occasionally got his assessments in on time. [5.2 TIME MANAGEMENT: INCONSISTENT].

The teachers were unable to comment about the student’s self-awareness in relation to his performance on assessments. The interviewer commented that at interview “he came across as intelligent, he was quite well spoken and appeared to be analytical in his approach.” One of the teachers commented and the other agreed “the American education system came out as being a lot better than ours. His overall knowledge of the world. I had some very interesting political discussion with him.” [5.3 SELF-AWARENESS PERCEPTION: UNABLE TO COMMENT].

4.2.8 Case 8: Helen

This 24-year-old student had completed Year 12 of schooling. She had never been a TAFE student before. She had worked full time in a pharmacy when she left school and was now working part-time as a pharmacy assistant after some overseas travel.

1.0 Existing knowledge awareness

This student was able to make a link between her past experience and the content of this assessment. “I used previous networks. I interviewed my employer and talked about what sort of places I should be looking at for representation in a pharmacy.” [1.1 WORK: CONTENT]. The student stated that she had no previous knowledge of the report writing component of this task.

2.0 Organising information

When asked about the gathering and organising of information she described her method for keeping track of the contacts she made: “I made a database of names and their contact phone numbers, addresses and what they did, otherwise I would have forgotten what they actually did.” [2.1 INFORMATION GATHERING PROCESS: ELECTRONIC].

She explained that she only included the relevant information in her database: “Some qualifications and education were from too long ago. Some support networks weren’t going to help the direction I wanted to go so I didn’t include them.” [2.2 SORTING AND SELECTING: ASSESSES RELEVANCE].

She also explained her method for sorting the information: “I used the brainstorming that we learnt in class to branch out ideas. I found brainstorming was the easiest way of doing things.” [2.3 SELF-AWARENESS: ORGANISING].

3.0 Planning and writing

For the planning of the report she explained:

I usually gather all the information before I start writing. That’s just how I’ve always done things. Usually I can’t type on a computer I have to

write it down on a piece of paper and do sections at a time under different headings on a piece of paper. [3.4 SELF-AWARENESS: PLANNING AND WRITING].

She described her approach to the writing of the report:

From the assessment we were given I put it into sections. The objective, and the job skills that I need to do that sort of job, and then I added the networks that I would use to try and get me there. [3.1 WRITING SEQUENCE].

4.0 Monitoring writing progress

She explained how she monitors her writing: “Once I’ve got a draft copy I go through the list (assessment guide).” To monitor her report writing, she also used a text book. “Actually I used the book a lot in this one to write down how I was going to write the report.” [4.1 TASK ADHERENCE: ASSESSMENT GUIDE/TEXTBOOK].

Whilst writing she stated that she was “hoping to put a good point across, trying to make sure it makes sense to me but also that it has a point. That it sounds interesting as well.” [4.3 SELF-AWARENESS: AUDIENCE].

She proofread her draft and again when she had finished the assessment. When she proofreads, she checks for “spelling mistakes, that it sounds like I’m not missing words or missing commas or abbreviations, that it all flows together.” [4.2 REVISION STRATEGY: DRAFT AND END, MAKES SENSE FLOW, SPELLING].

5.0 Regulation of behaviour

Helen said she sought help from her teachers for setting out the report, and her mother also proofread her assessment: “I read and try and get feedback from you. Also my mum is a great help, she is big on literacy. She is the one who reads my work, sometimes.” [5.1 HELP SEEKING: TEACHER/HOME].

She prepared her assessment at home in her bedroom because “it’s quiet and it’s private and I can just focus.” [5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION].

When asked about her allocation of time, she stated “I get started straight away, I can’t leave it. I usually do it on days that I’m not at TAFE, days where I’ve got a full day to concentrate.” [5.2 TIME MANAGEMENT: DAYS NOT AT TAFE].

6.0 Reaction and reflection

This student reflected on the assessment task and made the following comments:

I think since being in the classroom for a few more weeks I’ve learnt how to lay things out better and how to research. I guess I’d do the writing differently, and the body of the assessment I’d have laid out differently with a bit more writing in it. But that all comes with learning over time.”

[6.1 PROCESS: WRITING]

She also reflected on her performance: “I know that I can focus a lot harder, when I am focused I can study for a long amount of time.” [6.2 OUTCOME: EFFORT EVALUATION].

Teachers’ comments

Overall, both teachers agreed that her level of planning, organising and proofreading was poor. [2.0, 3.0, 4.2 PLANNING, ORGANISING PROOFREADING: POOR].

One teacher stated “she was an interesting one. Her document layout was all over the place, proofreading was poor and following guides was also average. She was capable, but she seemed to rush things a lot.” [4.1 TASK ADHERENCE: MARGINAL].

They felt the overall effort she put into her assessments was just “enough to pass” and she usually got her assessment in on time but always seemed “rushed”. [5.3 EFFORT PERCEPTION: ENOUGH TO PASS]; [5.2 TIME MANAGEMENT: GOOD]. Her teachers stated that she sought their help about forthcoming assessments and definitely demonstrated improvement after feedback. [5.1 HELP

SEEKING CONSISTENTLY]; [5.3 FEEDBACK RESPONSE POSITIVE WITH ACTION]. According to the teachers, this student was well aware of when she had put in a poor effort. [5.3 SELF-AWARENESS PERCEPTION: ACCURATE].

4.3 Cross-Case Results

Cross-case results are reported under the six major categories and twenty-one subcategories. Three subcategories have been added to detail the results of the teachers' perceptions of the students' response to feedback, effort perception and self-awareness (see Table 3). Analysed data from the teacher interviews are reported within the appropriate subcategory under the heading "Teachers".

TABLE 3 - CROSS-CASE HEADINGS AND SUBHEADINGS

Category	Sub-category
1. Existing knowledge awareness	1.1 School, work, other 1.2 Self-efficacy
2. Organising information	2.1 Information gathering process 2.2 Sorting and selecting 2.3 Self-awareness
3. Planning and writing	3.1 Writing sequence 3.3 Prior knowledge application 3.3 Task analysis 3.4 Self-awareness
4. Monitoring writing progress	4.1 Task adherence 4.2 Revision strategy 4.3 Self-awareness

Category	Sub-category
5. Regulation of behaviour	5.1 Help seeking 5.2 Time management 5.3 Assessment preparation environment 5.4 Self-awareness Teachers: 5.5 Self-awareness perception 5.6 Feedback response 5.7 Effort perception
6. Reaction and reflection	6.1 Process 6.2 Outcome

4.3.1 Existing knowledge awareness

From analysis of the interview data, all participants claimed some connection between components of this assessment task (writing a report or establishing networks) and their existing knowledge. Two subcategories emerged: school, work, other; and self-efficacy.

4.3.1.1 School, work, other

Three of the participants, Colin, Gary and Donna, believed that they had knowledge of the report writing component from school.

Colin: “We did it fairly extensively in school... they did teach us a lot of report writing in English.”

Gary: “The knowledge I had for report writing (from school) was what I used.”

Donna: “I was used to doing essays.”

One participant, Eliza, said she had knowledge of report writing but did not give any detail.

Four of the participants, Angela, Helen, Barbara and Frank, believed they had knowledge and experience of networking from their workplace or life experience.

Angela: “I was able to link a lot of it to my current job in HR.”

Helen: “I used previous networks. I interviewed my employer and talked about what sort of places I should be looking.”

Barbara: “I have had previous experience and exposure to networking.”

Frank: “Most of the skills I already know.”

One participant made a connection between the content and a similar task he had done for university entrance:

Gary: “When I had to apply for my university for Journalism in Iowa they kind of had a similar thing.”

4.3.1.2 Self-efficacy

Seven of the eight participants made confidence or self-efficacy judgments of their ability to perform this task. For example:

Colin: “I knew how to write a report. I could do that.”

Barbara: “I thought, I can do this... I know I could contact them.”

Frank: “I find it really easy to talk to people.”

4.3.2 Organising information

The assessment task required participants to find information on a job role and record a minimum of seven skills associated with this occupation. In doing this, they were asked to establish a network of new and old contacts that could assist them. During this process, participants were expected to locate, evaluate, and effectively select and organise information for their report. The assessment task also instructed participants to create a record of old and new networks in a mind map and a linked database. From the analysis of the interview data, three subcategories emerged – information gathering process, sorting and selecting, and self-awareness.

4.3.2.1 Information gathering process

Three participants described their information gathering process as an electronic tracking of information and three described a combination of hand-written notes and electronic tracking.

4.3.2.2 Sorting and selecting

Four participants sorted the information for relevance before assembling their report. For example:

Colin: “I linked information into the questions on the assessment sheet and used the ones that were relevant to the assessment.”

Two participants also explained how they arranged the information in their report.

For example:

Angela: “I put it into chronological order, where I wanted to put it in the report.”

Frank: “I found it easier separating it by people.”

Two of the participants stated that they included all of the information they gathered.

Donna: “I just put it in and made up another heading for it just to go in as extra.”

Barbara: “I put everything in my report. I put them all into a barrel and talked about them all.”

4.3.2.3 Self-awareness

Two of the participants evaluated their organising skills:

Angela: “Information gathering process was a little bit messy, sorting was really hard.”

Barbara: “I’m not very good with organising.”

Two of the participants described an awareness of their preferred style for gathering and sorting information:

Helen: “I found brainstorming was the easiest way of doing things.”

Frank: “I’d rather do it on computer because it is so much easier just to bring it home. I have a Word document with class notes for this date... It’s just so much easier to keep track of.”

4.3.3 Planning and writing

Participants were asked to explain how they translated the information they gathered into written text. From the interview data, four subcategories emerged — writing sequence, prior knowledge application, task analysis and self-awareness.

4.3.3.1 Writing sequence

All participants explained their approach in terms of writing sequence. For example:

Helen: “I put into sections. The objective and the job skills that I need to do that sort of job, and then I added the networks that I would use to try and get me there.”

Angela: “I started off with what the whole assessment was about, the job skills and why I chose it. The next part would have been what sort of helped me to fulfill that criteria, so that would be my networks.”

Eliza: “I started with the bit more easier things for me like the title page.”

Gary: “I’ll start writing my introduction paragraph and come up with a thesis.”

4.3.3.2 Prior knowledge application

Four participants made comments about their application of report writing knowledge:

Colin: “I just went with what knowledge I had on report writing.”

Angela: “That’s how I thought things normally go.”

Eliza: “I just remembered what I had done in the past, that I have to have a title page and table of contents....”

Gary: “At school I was taught to start with a thesis.”

Two participants commented on their application of their content knowledge:

Barbara: “We learnt about like the outline of skills in high school in our work and business class.”

Gary: “I knew what I wanted, what skills I wanted. I kind of used that information that I’d thought of a long time ago.”

4.3.3.3 Task analysis

Two participants’ described how they analysed the task:

Colin: “I looked at what job I wanted to do and what kind of studies would get me there. I looked at how that information will help me in into the job that I wanted to do. I linked the information to the questions on the assessment sheet.”

Eliza: “I had to read it again and again and I had to ask the teacher if I was unsure and then I thought about the job I wanted to do in the future and then I started writing.”

4.3.3.4 Self-awareness

Three participants described an awareness of their preferred style of planning and writing:

Barbara: “I like to write it out so I can see the structure and I can look at it as I go. I prefer to see it in front of me as a written document and then add bits and take bits out.”

Frank: “I like to go in order, usually I like things structured. I try to do it in sections.”

Helen: I usually gather all the information before I start writing. That’s just how I’ve always done things. Usually I can’t type on a computer I have to write it down on a piece of paper and do sections at a time under different headings on a piece of paper.

Teachers

Analysis of the teachers’ perceptions of the participants’ level of organising and planning of written submissions over the 20 weeks revealed that two participants were inconsistent (Barbara, Gary), two were poor (Colin, Helen) and three were good (Donna, Eliza, Frank). Only one was excellent (Angela). The teachers made the following comments:

(Barbara): “Flashes of good but not consistent. Included extraneous matter, she did not question relevance, found something that she thought looked good, copied it and put it in.”

(Gary): “In some instances when he fully understood the task at hand he responded well, he wasn’t consistent.”

(Colin): “Not as good as it could have been. ...understating himself the whole time. He was a classic case of just doing enough. He was lazy.”

(Helen): “Her document layout was all over the place.”

(Frank): “His process wasn’t good... The content was good. The way it was structured was also good.”

4.3.4 Monitoring writing progress

Participants were asked to describe how they monitored their writing progress and four subcategories emerged: task adherence, help-seeking, revision strategy and self-awareness.

4.3.4.1 Task adherence

Seven of the eight participants described how they used the assessment guide to ensure they were adhering to the task. For example:

Colin: “I kept looking back at the assessment sheet to see if I could match the criteria.”

Donna: “I just follow the assessment layout, like the bits we had to include and that’s all. I just had to keep going back to the assessment layout and making sure that what’s required was being like written.”

Eliza: “When I wrote a paragraph I checked with this paper (assessment) if I was doing it right or not.”

Two of the participants also sought help from their text book, and one also used class notes:

Helen: “Actually I used the book a lot in this one to write down how I was going to write the report”.

Barbara: “I looked into the book that we got for class. They said we did need a conclusion, body and recommendation so I looked at ones that had that and chose to write in that style. I sort of went back on my previous notes that we’d done in class.”

Teachers

Analysis of the teachers’ perceptions of the participant’s ability to follow assessment guides over the 20 weeks revealed that two participants, Angela and Eliza, were good and sometimes excellent while four of the eight participants, Barbara, Colin, Gary and Helen were marginal or inconsistent.

The teachers initially debated Donna’s ability to follow assessment guides and made the following comments:

“When I marked her work, I don’t think she followed the assessment guides because I often had to say to her you haven’t done this or this.”

Both teachers conceded that for this assessment she did follow the assessment guide but that “this was a fairly straightforward assessment to follow.”

The teachers believed they were unable to comment on Frank’s ability to follow the assessment guide and made the following comment:

He had a lot of questions to ask about them because he was so afraid that he didn't understand them, he almost put up a block and denied that he could understand them. He asked many questions about the instructions. He told us he disagreed at times with the way the assessments were worded.

4.3.4.2 Revision strategy

Seven of the eight participants said they proofread their writing more than once, while one participant (Donna), proofread only at the end. They proofread for flow, repetition, to make sure it made sense, for grammar, spelling and/or punctuation and to check their choice of words.

Teachers

The teachers were asked to evaluate the participants' proofreading skills over the 20 weeks based on their assessment submissions. Analysis of teachers' responses revealed that two participants, Angela and Frank, had proofreading skills that were excellent. Five of the participants, Helen, Donna, Colin, Barbara, and Gary, were considered to have poor or inconsistent proofreading skills. The teachers made the following comments:

(Donna): "I believe she did proofread it but her sentences were very long and repetitive. Reading her work, she missed a lot...."

(Helen): "Her document layout was all over the place, proofreading was poor and following guides was also average. She was capable, but she seemed to rush things a lot."

One teacher stated that one participant, Barbara, "could not get the spelling right even when the teacher corrected it for her."

The teachers claimed that they were unable to judge the proofreading skills of one participant, Eliza, and made the following comment: "She probably didn't have the ability to proofread her work because her English wasn't strong enough".

4.3.4.3 Self-awareness

Three participants described a self-awareness of their writing skills:

Colin: "Mainly I just use waffle. I try to extend the words and drag it on a bit."

Frank: “I am pretty good with spelling and grammar. I’m a person that can over-check things. Sometimes it can be a good thing or a bad thing. I just like to make sure everything is perfect.”

Gary: “I get stuck a lot with the writing so I read it a lot, read whatever I’ve written a lot and I analyse as I read. I come up with ideas for the next paragraph or the next sentence.”

Two participants described an awareness of their thoughts whilst writing:

Frank: “I thought about which of these (skills) I would be good at and which I’d be bad at just based on what people told me.”

Helen: “I was hoping to put a good point across, trying to make sure it makes sense to me but also that it has a point. That it sounds interesting as well.”

Two participants described an awareness of self-monitoring and adjustment of their writing:

Angela: “I found that as I moved further into the body, I had to go back and change a little bit of what I said at the beginning because it didn’t quite match. Like it didn’t go from one point straight into another, it sort of jumped from place to place.”

Frank: “I had all notes about one thing on a different page and then I changed all that. I think I ended up like changing the whole introduction. I did it first before I got the information.”

4.3.5 Regulation of behaviour

Participants were asked to describe how they regulated their behaviour. From the interview data, four subcategories emerged: help-seeking, time management, assessment preparation environment and self-awareness. In addition the teachers were asked their perception of the student’s response to feedback, effort and self-awareness, and analysis of this data is reported at the end of this section.

4.3.5.1 Help seeking

Six of the participants said they sought home help. For two participants, this was in relation to checking their writing.

Eliza: “My boyfriend read it and he’s the only other person. I wanted to be sure that I was doing the right thing.”

Helen: "My mum is a great help, she is big on literacy. She is the one who reads my work, sometimes."

For four of the participants home help was in relation to establishing networks. For example:

Colin: "I asked my mum about the contacts so that would help me with future jobs."

Gary: "I got most of my personal contacts from Dad and yeah I think it just helped me gather information."

Two of the participants said they sought help from peers specifically to check they were doing the task correctly:

Donna: "Towards the end I checked with Sandy to see if she was doing the same thing that I should have been doing. I did what I thought was right and asked her if it is the same."

Frank said he collaborated with his peers when "trying to figure what was the best way to do it (the mind map)."

Five of the participants stated that they did not seek any additional help from the teacher for this assessment task, and four of the five participants gave reasons:

Frank: "This assessment was mostly pretty straightforward".

Gary: "Sometimes I was confused but nothing I couldn't figure out by myself."

Colin: "I didn't really talk to anyone in my class about it or the teachers, because mainly I did most of the report at home."

Donna said she would only ask the teacher if "I didn't understand something and if Sandy didn't understand it."

Three of the participants said that they sought additional help from the teachers for the report writing, and one participant also sought assistance from a different teacher.

Barbara: I did ask the teacher how best to set out my report. I usually try and get another person to have a look at it to see if they understand. The teacher within my computing class to was happy to do it. She fixed up my grammar and my spelling.

Eliza: "I had to ask the teacher if I was unsure."

Helen: "I read and try and get feedback from you."

Teachers

The teachers were asked to comment on the participants' degree of help-seeking; this was generally in relation to teacher expectations, forthcoming assessments or clarification of feedback over the 20 weeks. Analysis of the teachers' comments revealed that three participants, Eliza, Frank and Helen, consistently sought help, while one participant, Barbara, sought help most of the time, and three participants, Donna, Angela and Gary, occasionally sought help. The teachers could not recall one participant, Colin, ever seeking their help. They also commented that one participant, Eliza, sought additional help through the college for her written expression.

4.3.5.2 Time management

The participants were asked how they budgeted their time for this assessment. Three of the participants described how they spaced it out over time, and two participants said they did it when they had free time. One participant said he prepared his assessment when he felt like it, another prepared it on the days not at college, and another did some preparation in class time.

Teachers

The teachers were asked to comment on participants' consistency in getting their assessments in on time over the 20 weeks. Analysis of teachers' responses revealed that six participants, Barbara, Colin, Donna, Eliza, Frank, and Helen, were mainly consistent in getting their assessments in on time. The teachers commented that although one participant, Helen, was mainly consistent, she always seemed "rushed". Two of the participants, Angela and Gary, were inconsistent in their time management. The teachers commented that one participant, Angela, had been absent from some classes due to personal circumstances and this had affected the consistency in getting her assessments in on time.

According to the teachers, one participant, Frank, "frequently got into some stress with time management but mostly got his assessments in on time. It took him three times longer than anyone else, he couldn't sort himself out. He was all over the place."

The teachers commented that one participant, Eliza, had self-managed well enough to “accommodate time away in Switzerland during semester.”

4.3.5.3 *Assessment preparation environment*

Seven of the eight participants said they prepared this assessment in their home while one participant, Barbara, used the college library. Six of the participants chose an environment because it was quiet and free from distractions and three of these participants chose an environment because it was equipped with the resources. For example:

Colin: “I can’t really do it at TAFE, it’s too noisy and I don’t really feel like doing it at TAFE.”

Donna: “I do it usually at home in the kitchen away from the TV where I don’t get distracted.”

Eliza: “It’s a quiet environment and I am usually at home alone, my boyfriend was working and I had all the space I needed.”

4.3.5.4 *Selfawareness*

Five participants portrayed an awareness of their time management.

Eliza: “I started early to write e-mails because I was worried that people wouldn’t respond to me quickly and I think I wasn’t stressed in the end. I had to wait for all the e-mails to be responded and meanwhile I was writing about the skills.”

Gary: “I didn’t use any timeline for it, I just did my work whenever I felt like it and if I got bored I’d take a break.”

Angela: “I found it relatively easy because I did it in the space of a week.”

Helen: “I get started straight away, I can’t leave it. I usually do it on days that I’m not at TAFE, days where I’ve got a full day to concentrate.”

Barbara: “I was running a bit late with this submission so I came to TAFE early. I was in the library, because I knew if I was home, I’d be distracted.”

Three participants described an awareness of competing interests and two of these participants described cramming.

Colin: “I did get it in on time but it was kind of left until the last minute. They did give us three assessments at the same time, so I had to focus on other assessments. I

am doing a part-time Japanese course, Cert IV as well. I have to do assessments for that. “

Frank: “I work three days and am at TAFE three days, I only get Sundays to do assessments. I ended up cramming a lot of it in on the Monday beforehand.”

Angela: “It was hard because it was given at the same time as the group one, so you sort of had to balance it.”

One participant described cramming as her preferred learning style.

Donna: “Usually I leave it till the last couple of days before the assessment is due. That way I am more motivated. I know I have to get it done because I know I don’t have that much time left so I have to get it all done in one day. If I’ve got time, if it’s not due the next day, sometimes I leave it.”

4.3.5.5 Self-awareness perception

Teachers

The teachers were asked about their perceptions of the participants’ self-awareness in relation to their academic performance over the 20 weeks. Analysis of these results revealed that the teachers perceived that five of the eight participants, Angela, Eliza, Donna, Helen and Colin, were self-aware most of the time. For example:

(Angela): “She made an assumption that she had put enough effort in to justify a successful result, in other words, competence.”

(Colin): “It was a hands off self-assurance attitude that he had at times. He knew to what levels that he could take stuff, to just be right.”

The teachers commented that one participant, Helen, “knew when she had put in a poor effort.” The teachers said that one participant, Barbara, was occasionally aware but without action. One teacher made the following comment: “She said that she was terrible at writing but she wasn’t aware to the point of trying to do something about it.” The teachers felt that one participant, Frank, had an inaccurate self-awareness

and they attributed this to his “very intense self doubt.” The teachers were unable to pass judgement on the self-awareness of one participant, Gary.

4.3.5.6 *Feedback response*

Teachers

The teachers were asked about the participant’s response to feedback on their assessments over the 20 weeks.

Analysis of teachers’ responses in relation to the participants’ response to assessment feedback over the 20 weeks revealed that seven of the eight participants responded positively to feedback. The teachers provided the following additional comments:

(Helen): “Definitely demonstrated improvement after feedback.”

(Colin): “Excellent when he realised he couldn’t just stuff around.”

(Frank): “He was intense.”

One participant, Barbara, responded poorly to feedback. One of her teachers commented “when it came to feedback, she wasn’t prepared to put in the effort to pass.” Both teachers suspected this participant had a learning difficulty, “possibly undiagnosed dyslexia.”

4.3.5.7 *Effort perception*

Teachers

The teachers were asked to consider how much effort they perceived had been put into assessments over the 20 weeks. Analysis of teachers’ responses revealed that that three participants, Angela, Barbara and Eliza, had put in sufficient effort, while four participants, Colin, Donna, Gary and Helen, had given minimal or just enough to pass.

One participant, Frank, consistently put in effort that the teachers considered over and above that required for his assessments. “He did well in assessments because he

was meticulous.” The teachers considered that two participants, Eliza and Angela, sometimes put in effort that was over and above that required for their assessments.

The teachers said that although one participant, Barbara, had put a fair amount of effort into her assessments, “a learning difficulty may have impacted.”

The teachers made the following additional comments on the four participants who were inclined to give minimal or just enough to pass their assessments:

(Colin): “He knew what levels that he could take stuff to, to just be right. He did enough to pass but sometimes he didn’t quite.”

(Donna): “Her goal seemed to be to be to pass.”

(Gary): “He put in minimal and often just enough to pass.”

(Helen): “She knew when she had put in a poor effort.”

4.3.6 Reaction and reflection

When given the opportunity to reflect on this task, participant responses were categorised as a reaction to or reflection on the process and/or the outcome.

4.3.6.1 Process

Three participants reflected on the report writing process:

Angela: “It’s difficult knowing how to write. I had no idea what was expected. I didn’t know how I was supposed to outlay all this material to make it presentable and understandable.”

Barbara: “I probably need to be more to the point and not waffle.”

Helen: “I think since being in the classroom for a few more weeks I’ve learnt how to lay things out better and how to research. I guess I’d do the writing differently and the body of the assessment I’d have laid out differently with a bit more writing in it. But that all comes with learning over time.”

Two participants reflected on their information gathering process:

Angela: “Information gathering process was a little bit messy, sorting was really hard”, and next time she would be “better organised to make the whole process a lot faster.”

Barbara : “I’d probably try and get more information than what I did. I mainly used one book and the internet. It would have been nice to get a more book-based report. Using different resources so you’ve got more information, combine everyone’s ideas and then make it your own.”

One participant reflected on his time management:

Colin: “If I had more time I would have contacted someone that actually works in the job I wanted. I never got any information directly [related] to the job that I wanted to do. I didn’t get that much time to contact other contacts for my future job.”

4.3.6.2 Outcome

Four participants reflected on the assessment outcome:

Eliza: “I don’t think I’d change anything”

Frank: “I was pretty happy with the way it turned out.”

Gary: “I think I was happy with what I did and how the teachers gave us instruction regarding the assessment.”

Colin: “For this assessment they gave me a competent.”

Three participants reflected on their effort:

Gary: “I think I could have put a bit more effort into it, but that’s just a personal thing though.”

Helen: “I know that I can focus a lot harder, when I am focused I can study for a long amount of time.”

Donna: “I would probably change it, because doing it a couple of days before makes you stress a lot while you’re doing it. Then again if I wasn’t stressing so much I probably wouldn’t have got it done as well as when I am a bit stressed out in class with a lot of things coming into your head like what you should be doing. If I did it at the beginning, if we got it today and I did it tomorrow then I’d just be doing it not very well, I’m not like I have to get this done because it’s due next day kind of thing.”

4.4 Summary

The results from the interview transcripts with eight VET business students provide information on how these participants organised, planned and monitored their writing during the submission of their first assessment, and how they regulated their behaviour. The results from teacher interview transcripts provide information on how four teachers perceived the students' ability to plan, organise and monitor their written submissions over a 20-week semester. Results also include the teachers' perceptions of the students' self-awareness, effort and feedback response.

Case by case results have provided a snapshot of each case and allowed the reader to understand the participant in its own context. Cross-case results have been reported under six categories, with teachers' results reported within these categories.

Common threads and anomalies across the cases are discussed in the next section.

5 DISCUSSION

5.1 Overview

The discussion section of this thesis addresses the research question, “What are the self-regulatory characteristics of 18-24 year olds completing a business administration assessment?” The chapter is divided into three sections: cognitive and metacognitive strategies, self-regulation and the writing process, and regulation of behaviour. Varying degrees of self-awareness were manifested throughout the study and are discussed within the relevant section. The participants’ statements ranged from little or no confidence to complete confidence in terms of completing the task and knowing their strengths and limitations as learners.

The eight participants were also given an opportunity to reflect on the task at the end of the interview; a discussion of the findings is included as a subheading of regulation of behaviour.

5.2 Cognitive and metacognitive strategies

Pintrich (1999) explains that a student’s knowledge of themselves, the task, and strategy variables relates directly to the monitoring, controlling and regulating of a student’s own cognitive activities and behaviour. Cognitive processing strategies are used to comprehend and perform the task and metacognitive strategies are used to control and regulate cognition and behaviour. Whilst cognitive skills are necessary to perform a task, metacognitive skills are necessary to understand how the task is performed (Gardner, 1987 cited in Schraw 1998).

5.2.1 Knowledge of self, task and strategies

Existing knowledge awareness, perceived self-efficacy (confidence in performing a task), and elaboration are cognitive strategies that help the learner process information about the task in order to clearly define it. Interpreting task requirements in terms of existing knowledge and self beliefs can motivate learning and self-regulation processes, including setting goals, self-monitoring, self-evaluation, and strategy use (Zimmerman, 2000b; Pintrich 2004).

Participants who were in the 22-24 year age bracket stated that they were able to link knowledge from their work or other life experience to this task. This was

predominantly in relation to the content of the report. The 18-year-old school leavers stated that they were able to link this task to existing report writing knowledge from school. It could, therefore, be inferred that traditional school leavers tend to draw on more recent formal knowledge attained in educational settings, probably due to lack of work or life experience, and those who are not school leavers have less current report writing experience.

Perceived self-efficacy is recognised as playing a significant role in motivation to achieve (Bandura 1989; Pintrich & DeGroot 1990; Zimmerman 2000b). All except one participant made positive self-efficacy statements in relation to their ability to perform the task; however, self-efficacy judgements made after the event, as was the case in this study, are less reliable (Zimmerman 2000b). For example, results of three studies carried out by Butler (cited in Schunk & Zimmerman 1998) revealed a shift between students' pre-test and post-test perception of task specific self-efficacy. Post-test, participants rated their competence to be higher on task-specific skills.

Whilst students may declare confidence in performing a task, they must also possess the skill and will to perform it. According to Pintrich (2002, p. 221), "self-awareness of the breadth and depth of one's own knowledge base is an important aspect of self-knowledge." The strength and accuracy of perceived self-efficacy and the quantity and quality of existing knowledge no doubt affects how knowledge is retrieved and applied. Some of the participants mentioned the application of their existing report writing knowledge, and two participants said they used content knowledge from a similar assignment they had done previously. In this study, it was not known how effectively existing knowledge was processed and retrieved. An important consideration here is that not all participants may have been able to externalise their thoughts or make knowledge of their processes clear.

Elaboration, a form of rehearsal, is a cognitive process that links new information with what one already knows. Elaboration strategies such as note-taking, paraphrasing, summarising and creating analogies help the student store information into long-term memory (Pintrich 2004; Schunk, 2008). Although all participants describe forms of note-taking, it is not known if, or how, elaboration strategies were applied. In this study, note-taking was labelled "information gathering process"

because responses were associated with a note-taking process that was used for gathering and tracking information for their report, rather than an elaboration technique that required learners to “construct meaningful paraphrases of the most important ideas expressed in text” (Schunk, 2008, p. 223).

According to Pintrich, Smith, Garcia and McKeachie (1991, p. 21), organisational strategies result in better performance by helping learners “select appropriate information and also construct connections among the information to be learned.” The ability to chunk and categorise information is a self-regulation trait associated with procedural knowledge (Schraw 1998). Examples of procedural strategies are clustering, outlining, and selecting the main idea in reading passages (Pintrich et al.).

For this study, the participants were expected to engage in a self-directed information-seeking activity that was meaningful to them — establishing networks whilst gathering information on a job role they were interested in pursuing. Most of the participants described information sorting and selecting strategies that prepared them for the writing of the report. Two of the participants stated that they included all information they found into their report.

Of particular interest in this category was Barbara’s admission that she had included all the information she found into her report and that she was not very good with organising. She did not express any desire to correct this and this was consistent with the teachers’ comments. On the other hand, Angela, considered one of the more capable students, made a similar self-observation of her organisational skills and acknowledged her need to improve this. It could be inferred that although Barbara exhibited accurate self-awareness, she may have lacked the strategic knowledge to change. According to Zimmerman (2002b) self-awareness does not necessarily lead to change but it can produce a readiness for change.

The teachers suspected Barbara had a learning disability and one indicator of this was the inclusion of a lot of “extraneous matter” in her reports. Butler (1998) explains that strategic deficiencies in students with learning disabilities are known to persist into adulthood. These students often have an inaccurate understanding of task demands and have trouble deciphering tasks. She gives an example of these learners

being capable of identifying words when reading, rather than pulling out the main ideas and this may have been the case with Barbara.

An increasing number of students with learning difficulties are enrolling in VET and other tertiary institutions and would benefit from support with developing learning strategies (Butler, 1998). The aim of instruction should be to help the student develop the three types of strategic knowledge that self-regulated learners possess:

1. Declarative knowledge – knowing about a variety of strategies;
 2. Procedural knowledge – knowing how to use these strategies; and
 3. Conditional knowledge – knowing why and when to use these strategies
- (Schraw, 1998, p. 114).

It could be argued that VET qualifications are aimed at the development and application of specific skills and knowledge, in contrast to higher education that is typically theoretical, with activities that are highly abstract in nature and command a greater focus on understanding and elaborating the learning material. However, it is acknowledged that the significance of this is likely to vary across tasks and between the different disciplines in VET (Slaats, Lodewijks & van der Sanden, 1999).

5.2.2 Self-regulation and the writing process

The discussion of participants' self-regulation traits during this writing activity is guided by Flower and Hayes' (1981) "Cognitive Process Theory of Writing". In this model the act of writing involves three major elements: task environment, long-term memory and the writing process. The writing process is divided into three components: planning the text, translating ideas into text and reviewing text as it is written.

The task environment begins with the problem and progresses throughout the development of the text. The writer's long-term memory includes the writer's existing knowledge of the task, consideration of the audience and the assessment goals. For this assessment, as is often the case in the classroom, the problem was well defined, the audience was the teachers and the goal was provided in the assessment outline. The results of this study suggested that each learner interpreted the assessment task in their own way and this was most likely influenced by their

existing knowledge. Two of the participants made statements that were labelled “Task Analysis” because they specifically described how they had carefully considered the task prior to commencing. This interpretation of results implies that the writing process progresses sequentially; however, according to the literature, good writing is a recursive problem-solving process (Schunk, 2008). It is therefore probable that participants were problem-solving at various stages of the writing process.

Planning, monitoring and reviewing are key self-regulatory processes that can lead to strategic adjustments in writing and positive long-term outcomes. Schunk (2008, p. 340) suggests “successful planning will increase its likelihood of future use and build self-efficacy for writing which positively impacts motivation and future writing.” Planning the text is described by Zimmerman and Risemberg (1997, p. 74) as having three cognitive subcomponents: “generating information that might be included in the composition, setting goals for the composition, and organising information that is retrieved from memory.” Generating and organising information are discussed in the previous section and are based on participants’ perceptions. All participants in this study described their approach to translating, or putting their ideas into text, in terms of “writing sequence” because they mainly described the order in which they wrote the report.

A study by Risemberg in 1993 (cited in Zimmerman & Risemberg, 1997) revealed that the degree of organisation of pre-writing notes led to the best writing outcomes. In this study, pre-writing notes, draft and final submissions were not analysed, therefore any relationship between the process and the product cannot be deduced. However, analysis of the teachers’ perceptions of the degree of planning and organising of written submissions over the 20 weeks suggested that half of the participants were inconsistent or poor in this area while several were mostly good. Only one participant, Angela, was considered excellent. Although Frank often submitted excellent products, the teachers were reluctant to rate his planning and organising highly because of his poor personal organisational skills.

The predominant external source used to monitor writing progress for this task was the assessment guideline. Only two participants said that they referred to their

textbook or class notes for guidance. However, the content for this assessment was mainly to be sourced through social interaction and this is discussed in the next section. Not all writing requires a high degree of self-regulation and as this task concerned the individual establishing networks while researching a job role of their choice, it is likely to have made fewer demands on cognitive processes (Graham, Harris & Troia, 1998, p. 21).

While all participants except one stated that they referred to the assessment guideline to monitor their progress for this assessment, analysis of the teachers' perceptions revealed that only two participants, Angela and Eliza, were able to consistently follow assessment guidelines over the 20 weeks. This could imply that they either had difficulty understanding some of the assessment guidelines over the 20 weeks or it could reflect the degree of difficulty of the task.

The majority of participants said that they proofread their writing more than once and all said they proofread for grammar, spelling and punctuation. A minority also said they reviewed to make sure that it made sense and to check for appropriate use of words. The teachers felt that the majority of the participants were poor or inconsistent in reviewing and proofreading their submissions over the 20 weeks. They commented that one participant, Eliza, probably did proofread her submissions but did not have the ability to amend her writing because she was an international student who struggled with English. Angela and Frank were the only participants the teachers considered to have excellent revision skills.

Graham, Harris and Troia (1998, p. 37) stipulate that professional writers all have different writing processes and vary their writing approach according to the subject or the task. They revise for problems in word choice and meaning, while poorer writers fail to recognise writing problems and revise predominantly for errors in spelling and punctuation (Schunk, 2008, p. 429). Good writers use a problem-solving process that involves continuous planning and adjusting whilst keeping the overall goal in mind. Interestingly, Angela and Frank, the only two participants the teachers considered to have excellent skills in this area, were also the only two participants who described an awareness of writing adjustment.

Angela: “I found that as I moved further into the body, I had to go back and change a little bit of what I said at the beginning because it didn’t quite match.”

Frank: “I had all notes about one thing on a different page and then I changed all that. I think I ended up like changing the whole introduction.”

Based on these findings, it could be inferred that Angela and Frank had engaged in some degree of recursive writing, Eliza had the motivation but lacked the ability, and the other participants limited their revision to surface considerations such as spelling and punctuation.

Writing concerns language and employs cognitive and metacognitive strategies. Self-efficacy is a significant predictor of writing achievement and the amount of self-reflection that occurs when learning and using strategies influences the level of transfer (Graham, Harris & Troia, 1998, p. 36). In this study two of the participants described an awareness of their writing skills in terms of strengths and weaknesses and one described her thought process whilst writing. Of most interest was Frank, who described self-reflection and high self-efficacy beliefs whilst writing. He made the following comments:

I am pretty good with spelling and grammar. I’m a person that can over check things. Sometimes it can be a good thing or a bad thing. I just like to make sure everything is perfect.

I thought about which of these (skills) I would be good at and which I’d be bad at just based on what people told me.

Although Frank was considered to have excellent writing skills, his teachers said that this was marred by “intense self-doubt”. According to Hofer, Yu and Pintrich (1998, p. 71), feelings of anxiety and self-doubt frequently arise in assessment or test situations. Even students like Frank, who have high self-efficacy beliefs, can become nervous, anxious and have distressing thoughts about themselves and their performance.

Whilst prompting students to reflect on their knowledge and learning processes whilst writing can result in higher achievement (Schunk, 2008), this does not ensure that strategy transfer will occur. If the learner is not mindful or motivated, they are less likely to know when to activate available strategies. This appeared to be the case with Gary, who gave a clear description of his writing process:

I get stuck a lot with the writing so I read whatever I've written a lot and I analyse as I read. I come up with ideas for the next paragraph or the next sentence. After I am done with the entire thing, I revise it again to see if there are any grammar errors and check the vocabulary.

Contrary to Gary's self-reflection, the teachers said that he did not pass some of his submissions because of his writing and minimal effort. They said "He was not unintelligent, he wasn't consistent".

The findings in this study, based on perceptions and confounded by intervening variables, are difficult to interpret (Graham & Harris, 2000). Salomon and Globerson (cited in Graham, Harris & Troia, 1998) argue that what people can do and what they are prepared to do can differ and the results of this study certainly indicate that several participants were consciously operating on a minimal effort principle. Equally, it is likely that the writing skills of some participants may have improved over the duration of the course. These factors, no doubt, contribute to the teachers' perceptions.

As mentioned previously, the writing process is not sequential and good writers typically plan and revise at frequent intervals. Graham, Harris and Troia (1998, p. 22) report that some college students, like many children, use a "retrieve and write" process. This is a forward-moving process with little recursive activity. Although they stipulate that this is not necessarily a thoughtless process, metacognitive controls of planning and revising are minimised. They state that "little attention is directed at the needs of audience, the constraints imposed by the topic, the organisation of the text or the development of rhetorical goals" (p. 21).

While support in self-regulation processes resulted in some improvement, a study conducted by Graham in 1997 (cited in Graham, Harris & Troia, 1998, pp. 37-38) revealed that the children in this study remained “indifferent to the possible concerns of their audience, overemphasized form, and struggled with separate elements of revising, including translating intended changes into acceptable written English.” They conclude that some college students, like the children in this study, would benefit from a balance of instruction on process, meaning and form to improve their writing skills. It is apparent that the VET students in this study would also benefit from this.

Good writing requires skill, motivation and self-reflective practice. VET students should be taught self-regulatory skills in the context of their assessments, with teachers modelling self-regulatory skills and then gradually fading this out. Asking students to record changes in aspects of their writing will encourage analysis and reaction at a metacognitive level (Zimmerman & Risemberg, 1997). In addition, writing tasks should be authentic and achievable, with a classroom environment conducive to the development of self-efficacy. It could be expected that with increasing age and experience, students will become more skilled at self-regulating their writing processes.

5.3 Regulation of behaviour

The application of appropriate strategies to “manage and control the material, and internal and external resources that the learner has at his disposal to reach his or her goals” affect performance (Boekarts, 1999, p. 457). This section discusses the participants’ behaviour in relation to help-seeking, time management and their assessment preparation environment. It also discusses their reaction and reflection in relation to the task.

A key self-regulation strategy is help-seeking. A large body of research supports that good students know when they don’t know something, why, and from whom to seek help to improve their learning (Pintrich, 2004; Schunk 2008; Zimmerman & Risemberg 1997). Good students are more likely seek help from others, including peers and teachers, in order to understand or clarify a task. Zimmerman claims that self-regulated learners are not asocial.

What defines them as ‘self-regulated’ is not their reliance on socially isolated methods of learning, but rather their personal initiative, perseverance, and adoptive skill. Self-regulated students focus on how they activate, alter, and sustain specific learning practices in social as well as solitary contexts. (2002, p. 70)

Although writing is mostly solitary in nature, social influences still play an important role in self-regulatory processes. According to Zimmerman and Risemberg (1997, p. 95), studies of professional writers have revealed that writers rely on others to “learn new techniques, to provide information regarding topics, to provide feedback to assist revisions.” However, they caution that the shift of novice writers from dependence on others to “self-regulated interdependence” can sometimes be an issue.

Analysis of the teachers’ comments revealed that all except one participant sought help to varying degrees over the 20-week semester. For this assessment task, however, over half of the participants stated that they did not seek any additional help from teachers or peers. This is evidenced in the following comments:

Frank: “This assessment was mostly pretty straightforward.”

Gary: “Sometimes I was confused but nothing I couldn’t figure out by myself.”

Colin: “I didn’t really talk to anyone in my class about it or the teachers, because mainly I did most of the report at home.”

As mentioned previously, this assessment task concerned the individual and was not considered difficult by some of the participants and their teachers. It therefore could be inferred that the likelihood of students seeking help depends on the level of need, and that if students are motivated and self-regulating, they are less likely to need or seek help.

Joseph points out:

Some adolescents are successful self-regulated learners who approach classwork with determination and confidence. They demonstrate

introspective skills as they analyse their assignment and find a way to work through their questions. Other students, by contrast, are passive, dependent learners who rely on the teacher or on other students for assistance rather than on their own abilities to resolve difficulties. (2010, p. 38)

Newman (2000) refers to research that proposes that help-seeking behaviour changes as children mature; some students, typically high achievers, become more self-regulated in their learning, while other students, typically low achievers, become passive or disengaged. However, the social interactive context can have a significant influence on help-seeking behaviours. It was not established in this study whether the participants perceived the teachers as willing to provide help, or whether the participants developed relationships with their peers over the semester and worked together on subsequent tasks. In addition, it was not known whether the learners avoided seeking help from their teachers because this was their first submission.

Research suggests that help-seeking orientation is multifaceted and linked to motivation, achievement goals and use of learning strategies. Help-seeking is labelled in the literature as “adaptive” and “maladaptive” (Newman 2000; Pintrich, 2004). Adaptive help-seeking is when the learner is focused on learning and seeks out help with difficult aspects of a task. According to Schunk (2008, p. 509) “The most adaptive type of help seeking is that which provides feedback on learning and progress”, and he suggests that students be encouraged by their teachers to seek assistance for the purpose of developing their academic skills. Maladaptive help-seeking is when the learner seeks an answer in order to complete a task quickly and without much effort. Maladaptive help-seeking can also be present when a learner avoids seeking help. Poor self-perception can lead to help-seeking avoidance because the learner fears looking dumb in front of the teacher (Newman, 2000).

Although many of the participants said they received help from home, it was difficult to label this a help-seeking characteristic because the task itself directed the learner to gather information through networking with friends and family. Help-seeking as a self-regulatory characteristic is more concerned about self-awareness and having the strategic knowledge to take corrective action in order to understand or clarify a task.

Clearly, help-seeking is more complex than a simple request for assistance. Help-seeking behaviours are prompted by different motivational patterns (Schunk, 2008). Boekarts (1999, p. 454), referring to Pintrich's model of self-regulation, states "an adaptive profile of motivational beliefs is essential to profit from learning environments which target self-regulated learning."

In an attempt to elucidate motivational patterns, the teachers' perceptions of participants' response to feedback and associated self-awareness and effort were examined. The main purpose of feedback is to reduce the gap between current understanding and the required performance or goal. It is the teachers' role to identify any gaps between the students' current performance and the required performance, and provide instruction and suggest actions to address those deficiencies (Curtis, 2010). The assessment task in this study provided one piece of evidence towards a unit of competency, "Establish Networks". Students were given an opportunity to re-submit their assessment in response to the teacher's feedback. This type of feedback is formative and "takes into account the progress of each individual, the effort put in and other aspects of learning that may not be specified in the curriculum..." (Harlen & James, 1997, p. 372).

Over the 20 weeks, the teachers said that all participants except Barbara responded to feedback positively and with action. One of Barbara's teachers commented "when it came to feedback, she wasn't prepared to put in the effort to pass." On the other hand, the teachers felt that she had put a fair amount of effort into some of her assessments and was occasionally self-aware, but without action. "She said she was terrible at writing but she wasn't aware to the point of trying to do something about it." Barbara said she sought help from her teachers as well as a teacher from a different class with her writing. She admitted: "I hadn't done reports since I was in Year 12... I wasn't very good, I never really understood the concept of report writing, so I found that quite difficult."

These results infer that this participant was self-aware, but had difficulty translating this awareness into specific strategies to monitor progress, problem-solve or make adjustments. This was most likely compounded by a suspected learning disability.

Practitioner education programs to help with the early identification and intervention of students with learning difficulties would be beneficial.

Two participants, Eliza and Helen, said they sought help with their writing from people at home as well as from their teachers, and this was consistent with the teachers' comments that these two students always sought their help. However, Eliza and Helen demonstrated very different types of help-seeking behaviour.

Eliza, an international student who struggled with the English language, demonstrated characteristics of an adaptive help-seeker. According to her teachers, she was self-aware and this was evident in her action to independently pursue support classes to improve her written English. She also sought additional assistance from her teachers to support her learning. She put a lot of effort into her assessments, and the teachers said she managed her time well to "accommodate a time away in Switzerland." Her comment also suggested she was strategic in her approach to time management: "I started early to write e-mails because I was worried that people wouldn't respond to me quickly and I think I wasn't stressed in the end."

Helen, on the other hand, demonstrated the characteristics of a less effective learner. Although, according to her teachers, she demonstrated definite improvement after feedback, she was well aware of when she had put in a poor effort. One of her teachers commented, "she was capable, but she seemed to rush things a lot." They felt that she put in just enough effort to pass her assessments. Reflecting on her performance for this submission, Helen admitted "I know that I can focus a lot harder." It could be inferred that this learner was dependent on the teachers' feedback.

Frank was one of two students who, according to his teachers, consistently put in effort over and above that required. "He did well in assessments because he was meticulous." According to his teachers, he consistently sought clarification from them and responded actively to any feedback they gave him. In fact they said that he was "intense" when seeking feedback and that this related to his "self-doubt". He was very self-aware of his learning style and told his teachers that he would function better in a more structured environment. The teachers felt he often underestimated

his ability, and they attributed this to his “very intense self-doubt”. From the teachers’ comments it could be inferred that this learner was dependent on feedback, which was strongly linked to his personality. However, based on self-regulation theory, it is evident that he did demonstrate characteristics of a good learner, seeking help with his learning and using feedback effectively.

Frank’s dispositional worry and anxiety highlights a relationship between personality and self-regulation. In attempting to understand individual differences in adaptation, Matthews, Schwan, Campbell, Saklofske and Mohamed (2000, p. 201) discovered that “self-regulative processing is prone to ‘cognitive distortions’ and biases in appraisal of self and of external demands”, and this clearly signifies the need for more research into the relationship between personality and self-regulation with behavioural outcome measures.

According to the teachers, all participants, except Eliza and Frank, were only prepared to put in minimal effort, or just enough to pass their assessments. For example, the teachers said that Colin’s response to feedback was “excellent when he realised he couldn’t just stuff around.” They said “We consider him an intelligent and capable learner. He did enough to pass but sometimes he didn’t quite.” The teachers said that Angela “made an assumption that she had put enough effort in to justify a success result, in other words, competence”, while Donna’s “goal seemed to be to pass”, and Gary gave “minimal and often just enough to pass”.

Hofer, Yu and Pintrich (1998, p. 81) conclude “... it may be that it is not just that college students do not know about strategies and how and when to use them, but that they have other beliefs that actually limit their use of strategies.” Many researchers agree that for most students “assessment is something that is done to them and they are passive subjects of it” (Curtis 2010, p. 9). The findings from this study could certainly be interpreted similarly. VET practitioners would benefit from using feedback strategies that give learners a more central and active role in the feedback process, to empower them to monitor and regulate their own performance, and to develop self-regulation strategies that help prepare them for lifelong learning (Nicol & MacFarlane-Dick, 2006).

Managing time is a crucial skill for all learners. In this study, each learner allocated time on this task differently and this was dependent on a range of factors, including competing interests, personal circumstances and learning styles. Competing interests included employment, extracurricular study and a need to balance this task with other tasks. Overall, the teachers felt that the learners mostly got their assessments in on time, with some more consistent than others.

Frank was very self-aware and made the following self-assessment, “I work three days and am at TAFE three days, I only get Sundays to do assessments. I ended up cramming a lot of it in on the Monday beforehand.” Judging from the teachers’ comments, Frank was able to accurately reflect on his time and effort, but he did not alter his behaviour: “He frequently got into some stress with time management, but mostly got his assessments in on time. It took him three times longer than anyone else, he couldn’t sort himself out. He was all over the place.”

Other participants also made judgements of their time and effort on this task. For example:

Colin: I did get it in on time but it was kind of left until the last minute. They did give us three assessments at the same time, so I had to focus on other assessments. I am doing a part-time Japanese course, Cert IV as well. I have to do assessments for that.

Gary: “I didn’t use any timeline for it, I just did my work whenever I felt like it and if I got bored I’d take a break.”

The results infer that these participants, several of whom worked part-time, each had their own priorities whilst studying. This placed constraints on their time and effort. This finding is consistent with Choy and Delahaye (2005, p. 2); their research project involving 18-24 year olds in TAFE and first year university found that “most youth use a surface approach to learning, largely due to time constraints, overwhelming volume of content and assessment requirements that reward outcomes achieved through a surface approach.”

Pintrich (2000) claims that reflection on time and effort spent on tasks is an important aspect of self-regulated learning. It can lead to a change in future effort and time management or even a change in future study. In this study, changes in students' behaviour on subsequent tasks were not measured. In the classroom, time set aside for occasional reflection on what is working and what is not could be valuable in feeding back into improved approaches to tasks.

The students were required to control and regulate their own assessment preparation environment for this task. The majority of participants said they had a specific place in their home where they prepared their assessments, and chose this environment because it was quiet and free from distractions, or because it was equipped with the resources. Pintrich states:

Monitoring of their study environment for distractions (music, TV, talkative friends or peers) and then attempts to control or regulate their study environment to make it more conducive for studying (removing distractions, having an organised and specific place for studying) can facilitate learning and seems to be an important part of self-regulated learning. (2000, p. 471)

The results infer that these students attempted to monitor their assessment preparation environment. However, it would be interesting, if not essential, to investigate the impact of internet distractions on regulation of time and effort. According to Xu:

Recently, concern over homework distraction has been growing, as new electronic media have offered diverse and nearly ubiquitous forms of diversion to students while they are doing homework. It is surprising to note, however, that a systematic examination of a broad spectrum of factors that contribute to homework distraction is noticeably absent from much contemporary literature. (2010, p. 1937)

An inference from the findings in this study is expressed well by Kaplan (2008, p. 483): “currently students do not adopt learning as their main purpose of engagement in school. Despite its common use in the literature, it seems that types of ‘self regulated achievement’ are much more prevalent than types of ‘self regulated learning.’” Indeed, Pintrich (2000, p. 493) queries; “Is this still adaptive self-regulation because it is in the service of the student’s own goals?”

5.3.1 Reaction and reflection

The self-reflection phase of the self-regulation cycle occurs after learning efforts and influences a learner’s reaction to that experience. Self-reflections in turn influence forethought or beliefs that precede subsequent efforts to learn (Zimmerman, 1998, p. 2). A discussion of the participants’ reactions and reflections to the task follows.

According to Bandura, (as cited in Zimmerman 2000a, p. 23), “highly self-regulated people value their intrinsic feelings of self-respect and self-satisfaction from a job well done more highly than acquiring material rewards.” Four participants, Eliza, Frank, Gary and Colin expressed satisfaction with the end result. Comments from Eliza and Frank suggested intrinsic feelings of satisfaction related to their performance on this task. Frank stated “I was pretty happy with the way it turned out.” Comments from Gary and Colin on the other hand were linked to extrinsic motivators of passing and pleasing the teachers. Colin said “For this assessment they gave me a competent.” In addition Colin, Gary and Helen made self-evaluative judgments of their time and effort:

Colin: If I had more time I would have contacted someone that actually works in the job I wanted. I never got any information directly to the job that I wanted to do. I didn’t get that much time to contact other contacts for my future job.

Gary: “I think I could have put a bit more effort into it, but that’s just a personal thing though.”

Helen: “I know that I can focus a lot harder, when I am focused I can study for a long amount of time.”

It is interesting that the two students who were intrinsically motivated were the two learners who demonstrated self-regulation traits of good learners in other areas and were rated by their teachers as putting in effort over and above that required into their studies.

Two participants' reactions related to the task and their lack of skills and knowledge:

Angela: "It's difficult knowing how to write. I had no idea what was expected. I didn't know how I was supposed to outlay all this material to make it presentable and understandable."

Helen: "I think since being in the classroom for a few more weeks I've learnt how to lay things out better and how to research. I guess I'd do the writing differently and the body of the assessment I'd have it laid out differently with a bit more writing in it. But that all comes with learning over time."

Reflections related to how a learner needs to alter his or her self-regulatory approach on future tasks can be classed as adaptive or defensive. Adaptive responses lead to improved future performance and defensive ones serve to protect the person (Zimmerman, 2000a). As there was no follow-up with the participants on subsequent tasks, it was not possible to make adaptive or defensive inferences. Zimmerman (2000a, p 23) notes that indicators of defensive responses are helplessness, procrastination, task avoidance, cognitive disengagement and apathy. Donna's procrastination certainly suggests a defensive response:

I would probably change it, because doing it a couple of days before makes you stress a lot while you're doing it. Then again if I wasn't stressing so much I probably wouldn't have got it done as well as when I am a bit stressed out in class with a lot of things coming into your head like what you should be doing. If I did it at the beginning, if we got it today and I did it tomorrow then I'd just be doing it not very well I'm not like I have to get this done because it's due next day kind of thing.

According to Pintrich (2002), there is a substantial body of literature linking students' motivational beliefs with cognition and learning. He suggests that it is important for students to develop knowledge and awareness of their motivation, and this includes assessing their level of interest in the task and their goals for completing the task. He also stresses that accuracy of self-knowledge is crucial, and teachers must help students make accurate self-assessments rather than inflate their self-esteem. "If students do not realize they do not know some aspect of factual, conceptual, or procedural knowledge, it is unlikely they will make any effort to acquire or construct new knowledge" (p. 222).

5.4 Summary

This discussion has highlighted some of the self-regulatory characteristics of these young adult learners whilst preparing a business administration assessment. It has also identified areas that merit further investigation, and suggested ways that VET practitioners can help students take control of their learning. Teaching programs that help develop knowledge of different cognitive and metacognitive strategies and tasks and accurate self-knowledge would benefit this group.

The self-regulation phenomenon is complex, and it seems apt to conclude this discussion with the following quote from Wolters, Pintrich and Karabenick (2003) portraying its complexity:

... it is not just individuals' cultural, demographic, or personality characteristics that influence achievement and learning directly, nor just the contextual characteristics of the classroom environment that shape achievement, but the individuals' self-regulation of their cognition, motivation and behaviour that mediate the relations between the person, context and eventual achievement. (2003, p.4)

6 CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

6.1 Overview

The response to the research questions is structured under two headings — cognitive and metacognitive strategies, and regulation of behaviour. It concludes with a brief summary and implications for future research.

6.2 Cognitive and metacognitive strategies

In this study it was not known how effectively existing knowledge was retrieved and processed, or how accurate perceived self-efficacy judgments were. It is likely that some of these young learners were unaccustomed to externalising their thoughts and making clear their knowledge of their own cognitive processes.

The assessment task required the participants to establish networks in the context of a job role they were interested in pursuing, and is thus likely to have placed fewer demands on cognitive processes. For example, it seemed that these students did not go into any great depth in understanding and elaborating learning material, or using strategies such as note-taking, paraphrasing, summarising or creating analogies. It could be argued that tasks in VET aimed at the development and application of specific skills do not require the same level of understanding and elaboration as higher education assignments that are typically theoretical, with activities that are highly abstract in nature.

Writing concerns language and employs cognitive and metacognitive strategies. Good writers typically plan and revise at frequent intervals. For the majority of these young learners, writing was a forward-moving process, with minimal use of metacognitive controls of planning and revising. Good writing requires skill, motivation and self-reflective practice. Several of these young learners were consciously operating on a minimal effort principle or knowing what was needed to be judged as competent and not doing any more. This would infer that they were less likely to be self-reflective or motivated when writing, and consequently, less likely to know when to activate cognitive and metacognitive strategies. It can be expected

that with increasing age and experience, many of these learners will become more skilled at regulating their writing processes. Examination of work samples over the 20 weeks may have provided a better picture of self-regulation characteristics within a writing activity.

To improve the writing skill of these learners, writing instruction needs to focus on a balance of instruction in process, meaning and form. Writing tasks should be authentic and achievable, within a classroom environment that is conducive to the development of self-efficacy. In addition, asking students to reflect on and record changes in aspects of their writing will encourage analysis and reaction at a metacognitive level. Students with learning difficulties tend to concentrate on lower order functions, and struggle with higher order demands such as writing to an audience, or organising ideas, and would benefit from one-on-one help with the development of self-regulation strategies.

The increasing number of students with learning difficulties enrolling in VET and other tertiary institutions indicates a need for further research into practitioner education programs that help practitioners with early identification and intervention. Teaching programs that help develop knowledge about different strategies, different cognitive tasks, and accurate self-knowledge would also benefit this group.

6.3 Regulation of behaviour

Help-seeking behaviours are complex, and prompted by different motivational patterns. The help-seeking behaviours of this group were difficult to characterise within the confines of one assessment task, in particular, their first assessment task. However, when examined together with the teachers' perceptions over the 20 weeks, adaptive and maladaptive help-seeking characteristics were identified. Adaptive help-seeking should be encouraged for the purpose of developing academic skills. That is, learners should be provided with just enough help for them to succeed on their own, rather than be provided with solutions to problems or questions, as this diminishes motivation. Although not so evident in this study, the literature states that learners often seek help from each other, and it would be useful to teach them how to provide instrumental help to each other. It is crucial that students are empowered to

monitor and regulate their own performance, and VET practitioners should be encouraged to employ strategies that give learners a more central and active role in the feedback process.

In this study, each learner had his or her own priorities, with several working part-time, and this no doubt placed constraints on time and effort. With many consciously operating on a minimal effort principle, it is likely that the self-regulation strategies that these students were able to use, and the strategies they were prepared to use, differed. The students who attributed their success to their own efforts rather than to external motivators such as passing or pleasing the teacher demonstrated greater use of self-regulation strategies. Data on the short-term and long-term goals of the participants would have been a valuable contributor to the analysis of motivation and associated behaviour.

What also became evident in this study was the relationship between personality and self-regulation styles; for instance, the progress of one of the learners was affected by intense anxiety and self-doubt. Further research needs to be conducted into the relationship between personality and styles of self-regulation. Although nearly all of the students had set up a suitable study environment in their home, it would be interesting, if not essential, to research the impact of internet distractions on time and effort.

6.4 Summary

In summary, the self-regulation characteristics of these young learners are dependent on a range of factors, including: purpose of engagement; differences in developmental stages, culture, commitments, and learning environments; and the task. As responsibility moves away from the teacher to the learner, it is important that teachers encourage learners to take an active role in self-reflection, in order to help them develop self-efficacy and to facilitate self-regulated learning. This study infers that the self-regulation skills of this group of young learners could be assisted by the following:

- encouraging students to interpret task requirements in terms of existing knowledge and self beliefs to motivate learning and self-

regulation processes including setting goals, self-monitoring, self-evaluation, and strategy use.

- promoting a balance of instruction on process, meaning and form to improve their writing skills.
- ensuring that writing tasks are authentic and achievable, within a classroom environment conducive to the development of self-efficacy.
- teaching students self-regulatory skills in the context of their learning activities, with teachers modelling self-regulatory skills and then gradually fading this out.
- prompting students to reflect on their knowledge and learning processes while writing.
- asking students to record changes in aspects of their writing to encourage analysis and reaction at a metacognitive level.
- highlighting the importance of the organisation of pre-writing notes as this could lead to better writing outcomes.
- encouraging students to seek assistance for the purpose of developing their academic skills.
- using feedback strategies that give learners a more central and active role in the feedback process.
- asking students to reflect on time and effort spent on tasks
- encouraging students to assess their level of interest and goals for completing the task
- helping students to make accurate self-assessments by setting time aside for occasional reflection on what is working and what is not

The study has identified three areas for further research. Specifically:

- the relationship between personality and styles of self-regulation;
- practitioner education programs that support early identification and intervention for students with learning difficulties and
- the impact of internet distractions on time and effort.

Understanding the self-regulation characteristics of this group is important. Such an understanding could inform improved teaching and learning practices in VET, and this is significantly related to current reform that focuses on maximising

engagement, attainment and successful transitions for young people in Western Australia. Themes that have emerged from this research provide the basis for further research into self-regulation and academic achievement in this age group. This could be relevant to the development of policy initiatives relating to sustainable quality teaching and learning practices for young adults in VET and other tertiary institutions.

REFERENCES

- Australian Curriculum Assessment and Reporting Authority (2011). *Engagement in VET*. Retrieved May 1, 2012 from http://www.acara.edu.au/reporting/national_report_on_schooling/senior_schooling_and_youth_transitions/vet_engagement.html
- Ayres, L., Kavanaugh, K. & Knafl, K. (2003). Within-case and across-case approaches to qualitative data analysis. *Qualitative Health Research*, 13(6), 871-883.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development* (6) (pp. 1-60). Retrieved September 9, 2007 from <http://www.des.emory.edu/mfp/Bandura1989ACD.pdf>
- Bandura, A. (2006). Adolescent development from an agentic perspective. In F. Pajeres & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents* (pp. 1-44). Connecticut: Information Age Publishing Inc.
- Berry, J. & West, R. (1993). Cognitive self-efficacy in relation to personal mastery and goal setting across the life span. *International Journal of Behavioral Development*, 16(2), 351-379. Retrieved August 29, 2007 from <http://jbd.sagepub.com>
- Black, D., Polidano, C., Tabasso, D. & Tseng, Y. (2011). *Second chance education: Re-engagement in education of early school leavers*. Final Report. Melbourne Institute of Applied Economic and Social Research.
- Boekaerts, M. (1999). Self-regulated learning: where we are today. *International Journal of Educational Research*, 3, 445-457. Retrieved September 2, 2007 from <http://www.ece.uncc.edu/succeed/journals/PDF-files/ijer-11.pdf>
- Briggs, A.R.J., Clark, J. & Hall, I. (2012). Building bridges: Understanding student transition to university. *Quality in Higher Education*, 18(1), 3-21.
- Butler, D. (1998). A strategic content learning approach to promoting self-regulated learning by students with learning disabilities. In D.H. Schunk & B.J.

- Zimmerman (Eds.), *Self-regulated learning from teaching to self-reflective practice* (pp. 160-183). New York: The Guildford Press.
- Chappell, C. (2004, March 17-19). *Contemporary vocational learning – Changing pedagogy*. Paper presented at The Seventh Australian VET Research Association Conference, Canberra, Australia. Retrieved September 2, 2007 from <http://www.avetra.org.au/>
- Choy, S. & Delahaye, B. (2003). *Youth learners: The authentic neglected species learning for an unknown future*. Retrieved September, 18, 2007, from <http://surveys.canterbury.ac.nz/herdsa03/pdfsref/Y1030.pdf>
- Choy, S. & Delahaye, B. (2005). *Some principles for youth learning*. Retrieved August, 28, 2007, from <http://www.avetra.org.au/>
- Cordingley, A., Lai, Y., Pemberton, M., Smith, J. & Volet, S. (1998). Regulation of learning in vocational education: An exploratory study. *Issues in Educational Research*, 8(1), 15-32. Retrieved August, 30, 2007 from <http://www.iier.org.au>
- Curriculum Council of Western Australia (2002). *Our youth, our future: Post-compulsory education review*. Retrieved October 5, 2012 from <http://curriculum.wa.edu.au/internet/Publications/Brochures/Brochures>
- Curtis, D. (2010). *Teaching, learning and assessment in TVET: The case for an ecology of assessment*. Paper presented at the South-East Asian Ministers of Education Organisation (SEAMEO) VOTTECH Conference ‘Exploring Best VET Policies and Practices through Research and Networking Initiatives’, Brunei Darussalam. Adelaide: National Centre for Vocational Education Research.
- De Groot, E. (2002). Learning through interviewing: Students and teachers talk about learning and schooling. *Educational Psychologist*, 37(1), 41-52. Retrieved August 20, 2009 from http://dx.doi.org/10.1207/S15326985EP3701_5
- Department of Education, Employment and Workforce Development (2011a). *DEEWR Strategic Plan 2011-2014*. Retrieved April 20, 2012, from

<http://www.deewr.gov.au/Department/Documents/Publications/StrategicPlan-interactive.pdf>

Department of Education, Employment and Workforce Development (2011b).

National Partnership Western Australia. Youth attainment and transitions annual report of May 2011. Retrieved April 20, 2012, from

http://www.deewr.gov.au/Youth/YouthAttainmentandTransitions/Documents/WA_AnnualReport.pdf

Department of Education, Employment and Workforce Development (2011c). *Skills overview.* Retrieved April 20, 2012, from

<http://www.deewr.gov.au/skills/overview/Pages/Overview.aspx>

Department of Education Employment and Workforce Development (2012).

Employability skills framework stage 1. Retrieved April 20, 2012 from

http://www.deewr.gov.au/Schooling/CareersandTransitions/EmployabilitySkills/Documents/EmployabilitySkillsFramework_Stage1FinalReport.pdf

Department of Education, Science and Training (2006). *Employability skills from framework to practice. An introductory guide for trainers and assessors.*

Retrieved April 20, 2009, from

http://www.training.com.au/documents/employability%20skills_from%20framework%20to%20practices.pdf

Figgis, J. (2009). *Regenerating the Australian landscape of professional VET practice: Practitioner-driven changes to teaching and learning.* Adelaide: NCVER.

Flower, L. & Hayes, J. R. (1981). A cognitive process theory of writing. *College composition and communication*, 32(4), 365-387.

Graham, S, Harris, K.R. & Troia, G.A. (1998). Writing and self-regulation: Cases from the self-regulated strategy development model. In D.H. Schunk & B.J. Zimmerman (Eds.), *Self-regulated learning from teaching to self-reflective practice* (pp. 20-41). New York: The Guildford Press.

Graham, S. & Harris, K. R. (2000). The role of self-regulation and transcription skills in writing and writing development. *Educational Psychologist*, 35(1), 3-12.

- Harlen, W. & James, M. (1997). Assessment and learning: Differences and relationships between formative and summative assessment. *Assessment in Education*, 4(3), 365-379.
- Hofer, B.K., Yu, S.L. & Pintrich, P.R. (1998). Teaching college students to be self-regulated learners. In D.H. Schunk & B.J. Zimmerman (Eds.), *Self-regulated learning from teaching to self-reflective practice* (pp. 57-85). New York: The Guildford Press.
- Isaacson, R. & Fujita, F. (2006). Metacognitive knowledge monitoring and self-regulated learning: Academic success and reflections on learning. *Journal of the Scholarship of Teaching and Learning*, 6(1), 39-55. Retrieved September 9, 2007 from http://www.iupui.edu/~josotl/VOL_6/NO_1/v6n1Isaacson.pdf
- Kaplan, A. (2008). Clarifying metacognition, self-regulation and self-regulated learning: What's the purpose? *Educational Psychology Review*, (20)4, 447-484.
- Karmel, T. (2011, February 28-March 1). *As clear as mud: defining vocational education and training*. Paper presented to TAFE Governance and Regulations Forum, Rendezvous Hotel, Melbourne. Adelaide: NCVER.
- Karmel, T. & Woods, D. (2008). *Second-chance vocational education and training*. Adelaide: NCVER.
- Joseph, N. (2010). Practical intelligence. Do students have it? Help them develop it through metacognitive learning. *Language Arts Journal of Michigan*, (26)1, 38-42.
- Lester, S. (1999). *An introduction to phenomenological research*. Retrieved 1 May, 2012, from <http://www.sld.demon.co.uk/resmethy.pdf>
- Livingston, K., Soden R. & Kirkwood, M. (2002). *Post-16 pedagogy and thinking skills: an evaluation*. Surrey: The Learning and Skills Research Centre.
- Matthews, G., Schwan, V.L., Campbell, S.E., Saklofske, D.H. & Mohamed, A.A. (2000). Personality, self-regulation and adaptation: A cognitive-social framework. In M. Boekaerts, P.R. Pintrich & M. Zeidner (Eds.), *Handbook of Self-regulation* (pp. 171-201). San Diego: Academic Press.

- Merriam, S. B. (1988). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass, Inc.
- Miles, M.B. & Huberman, A.M. (1994). *Qualitative data analysis*. California: SAGE Publications, Inc.
- Montalvo, F. & Torres, M. (2004). Self-regulated learning: Current and future directions. *Electronic Journal of Research in Educational Psychology*, 2(1), 1–34.
- National Health and Medical Research Council (2008). *Joint NHMRC/AVCC Statement and Guidelines on Research Practice (1997)*. Retrieved March, 27, 2008 from <http://www.nhmrc.gov.au/FUNDING/policy/researchprac.htm>
- Newman, R. (2000). Social influences on the development of children's adaptive help seeking: The role of parents, teachers, and peers. *Developmental Review*, 20, 350–404.
- Nicol, D.J. & MacFarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218.
- Patrick, H. & Middleton, M.J. (2002). Turning the kaleidoscope: What we see when self-regulated learning is viewed with a qualitative lens. *Educational Psychologist*, 37(1), 27-39.
- Pintrich, P. & De Groot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.
- Pintrich, P.R. (1999). The role of motivation in promoting and sustaining self-regulated learning. *International Journal of Educational Research*, 31, 459-470.
- Pintrich, P.R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P.R. Pintrich & M. Zeidner (Eds.), *Handbook of Self-regulation* (pp. 452-494) San Diego: Academic Press.
- Pintrich, P. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into Practice*, 41(4), 219-225.

- Pintrich, P. (2004). A conceptual framework for assessing motivation and self-regulated learning in college students. *Educational Psychology Review*, 16(4), 385-407.
- Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, 26, 113-125.
- Schunk, D.H. & Zimmerman, B.J. (1994). Self-regulation in education: Retrospect and prospect. In D.H. Schunk & B.J. Zimmerman (Eds.), *Self-regulation of learning and performance* (pp. 305-314). New Jersey: Lawrence Erlbaum Associates, Inc.
- Schunk, D.H. (2008). *Learning theories: an educational perspective* (5th ed.). New Jersey: Pearson Prentice Hall.
- Slaats, A., Lodewijks, H. G. & van der Sanden, J.M. (1999). Learning styles in secondary vocational education: disciplinary differences. *Learning and Instruction*, 9, 475-492.
- Smith, P. & Dalton J. (2005). *Getting to grips with learning styles*. Adelaide: National Centre for Vocational Education Research
- Vermunt, J.D. (1996). Metacognitive, cognitive and affective aspects of learning styles and strategies: A phenomenographic analysis. *Higher Education*, 31(1), 25-50.
- Western Australian Department of Training. (2002). *Shaping the VET practitioner for the future*. East Perth: David Rumsey and Associates.
- Western Australian Department of Training (2006). *VET teaching and learning: The future now 2006–2010. The roles, knowledge and skill requirements of the VET practitioner*. Retrieved on April 10, 2012, from http://vetinfonet.det.wa.edu.au/progdev/docs/future_now_2006-2010.pdf
- Wheelahan, L., Arkoudis, S., Moodie, G., Fredman, N. & Bexley, E. (2011), *Shaken not stirred? The development of one tertiary education sector in Australia*. Adelaide: NCVER.

- Wolters, C., Pintrich, P. R. & Karabenick, S. A. (2003). Assessing academic self-regulated learning. *Paper presented at the Indicators of Positive Development Conference*, Washington, DC, March 12-13, 1-49.
- Xu, J. (2010). Predicting homework distraction at the secondary school level: A multilevel analysis. *Teachers College Record* 112(7), 1937-1970.
- Yin, R.K. (2003). *Case study research design and methods (3rd ed)*. Thousand Oaks: SAGE Publications, Inc.
- Zimmerman, B.J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D.H. Schunk & B.J. Zimmerman (Eds.), *Self-regulated learning from teaching to self-reflective practice* (pp. 1-19). New York: The Guildford Press.
- Zimmerman, B. (2000 a). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P.R. Pintrich & M. Zeidner (Eds.), *Handbook of Self-regulation* (pp. 13-35). San Diego: Academic Press
- Zimmerman, B. (2000 b). Self-efficacy: An essential motive to learn. *Contemporary Educational Psychology*, 25, 82-91.
- Zimmerman, B. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64-70.
- Zimmerman, B.J., & Martinez-Pons, M. (1986). Development of a structured interview for assessing students' use of self-regulated learning strategies. *American Educational Research Journal*, 23(4), 614-628.
- Zimmerman, B. & Risemberg, R. (1997). Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, 22, 73-101.

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APPENDICES

Appendix 1 – Pintrich’s phases and areas for self-regulated learning

Appendix 2 – Student interview schedule

Appendix 3 – Teacher interview schedule

Appendix 4 - Summary of self-regulation labels and descriptors for cases

Appendix 5 – Ethical approval for research involving humans

Appendix 6 – Participant information form for students

Appendix 7 – Participant information form for teachers

Appendix 8 – Consent form

Appendix 9 – Letter to Managing Director, Central Institute of Technology

Appendix 10 – Assessment Task

Appendix 1 – Pintrich’s (2004, p. 390) phases and areas for self-regulated learning

Phases and relevant scales	Areas for regulation			
	Cognition	Motivation/Affect	Behavior	Context
<i>Phase 1</i> Forethought, planning, and activation	Target goal setting Prior content knowledge activation Metacognitive knowledge activation	Goal orientation adoption Efficacy judgments Perceptions of task difficulty Task value activation Interest activation	Time and effort planning Planning for self-observations of behavior	Perceptions of task Perceptions of context
<i>Phase 2</i> Monitoring	Metacognitive awareness and monitoring of cognition	Awareness and monitoring of motivation and affect	Awareness and monitoring of effort, time use, need for help Self-observation of behavior	Monitoring changing task and context conditions
<i>Phase 3</i> Control	Selection and adaptation of cognitive strategies for learning, thinking	Selection and adaptation of strategies for managing, motivation, and affect	Increase/decrease effort Persist, give up Help-seeking behavior	Change or renegotiate task Change or leave context
<i>Phase 4</i> Reaction and reflection	Cognitive judgments Attributions Rehearsal Elaboration Organization Critical Thinking Metacognition	Affective reactions Attributions Intrinsic Goals Extrinsic Goals Task Value Control Beliefs Self-Efficacy Test Anxiety	Choice behavior Effort Regulation Help-Seeking Time/Study Environment	Evaluation of task Evaluation of context Peer Learning Time/Study Environment

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Appendix 2 – Student interview schedule

Student:	
Date:	
Time:	
Date of birth:	Age:
COGNITION	Interviewer's observations/reflections
Elaboration/Organising/Critical thinking	
1. What connections did you make between this task and other study you've done or life experience? <i>Content of this task</i> <i>Researching skill</i> <i>Report writing</i>	
2. How did you use this knowledge? <i>a. To solve a problem</i> <i>b. To reach a decision</i> <i>c. To make a judgment</i>	
3. How did you gather and keep track of material for this task? <i>a. What is your system?</i> <i>Diagrams, flow charts, mind maps or some other way of representing information</i> <i>b. How did you decide what should or should not be included in your report?</i>	

METACOGNITION	Interviewer's observations/reflections
Planning, monitoring, regulating	
<p>4. How did you plan your report?</p> <p>5. What did you do to get yourself started with the writing of the report?</p> <p>a. <i>Start writing with the knowledge that is immediately available, or you have a technique to get started e.g. brainstorming, concept map, any other?</i></p> <p>b. <i>Was this approach a conscious decision?</i></p> <p>c. <i>How do you keep your writing progressing logically?</i></p> <p>d. <i>What role, if any, did your prior knowledge play?</i></p> <p>e. <i>Did you need to change your approach (if you realized there was a problem?)</i></p>	
<p>6. How do you check your writing for task adherence? Structure adherence?</p> <p>a. <i>Refer to assignment task</i></p> <p>b. <i>Marking guides</i></p> <p>c. <i>Mind map</i></p> <p>d. <i>Self questioning when writing</i></p> <p>e. <i>Write down questions or make notes about areas to follow up or change when reviewing your writing</i></p> <p>f. <i>Compare your writing with past efforts?</i></p> <p>g. <i>Compare your finished writing structure with the planned or anticipated structure that was decided upon in the planning stages</i></p> <p>h. <i>Seek feedback from any other sources</i></p>	
<p>7. How do you revise (correct or check) your written work?</p> <p>a. <i>Do you revise progressively/on completion?</i></p> <p>b. <i>What do you look for? (Format of report, English expression spelling, grammar errors, sentence/paragraph construction, content?)</i></p> <p>c. <i>What types of things do you think about when writing? When does reflection occur?</i></p>	

BEHAVIOUR	Interviewer's observations/reflections
<p>Peer learning/help seeking</p> <p>8. What role did the people in your home play in this submission? What role did your teachers play? How about your peers?</p> <p>a. <i>How did you identify who was able to help you?</i></p> <p>b. <i>If you need clarification of concepts you don't understand, who do you ask?</i></p>	
<p>Study environment/time management/ reaction and reflection</p>	
<p>9. In what kind of environment did you mainly prepare this task? Why did you choose this environment?</p>	
<p>10. Explain to me how you allocated your time to this task.</p>	
<p>11. When faced with other activities/distractions (or if a task is boring) what do you do?</p> <p>a. <i>Do you quit before you finish, work hard even if you don't like it, give up and only study the easy parts, keep working till you finish?</i></p>	
<p>12. Looking back, would you change your approach to this task? How?</p>	

Appendix 3 – Teacher interview schedule

Student: _____

Teachers: _____

Date: _____

Time: _____

	Poor	Marginal	Good	Excellent
1. How would you rate his/her level of planning and organising of information?				
2. Level of proofreading before submission?				
3. Followed assessment instructions and marking guides?				
4. Demonstrated feedback response/improvement ?				
	Minimal	Enough to pass	Over and above	
5. How much effort were they prepared to put in to assessments?				
	Never	Occasionally	Most of the time	
6. Overall did he/she get assessments in on time?				
7. Demonstrate awareness of how he/she has done?				
8. Did this student seek assistance from you on his/her own when having difficulty understanding?				
What was it about?				

Student Name:	Teacher reflections/observations
Level of planning and organising information	
Level of proofreading before submission	
Followed assessment instructions and marking guides	
Demonstrated feedback response/improvement	
How much effort prepared to put into assignments	
Assessment in on time	

Awareness of how she has done	
Seeks assistance from teacher when having difficulty	
About:	

Appendix 4 – Summary of self-regulation labels and descriptors for cases

CASE 1: ANGELA

1.0 Existing knowledge awareness

[1.1, 1.2 WORK SELF-EFFICACY JUDGEMENT: CONTENT]

2.0 Organising information

[2.2 SORTING AND SELECTING: ARRANGES IN ORDER AND ASSESSES RELEVANCE]

[2.3 SELF-AWARENESS: ORGANISING].

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.2 PRIOR KNOWLEDGE APPLICATION]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE]

[4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, REPETITION, FLOW, OWN WORDS]

[4.3 SELF-AWARENESS: WRITING ADJUSTMENT]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: NEGATIVE]

[5.2 TIME MANAGEMENT: SPACED OVER TIME]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

[5.4 SELF-AWARENESS: TIME MANAGEMENT]

[5.4 SELF-AWARENESS: COMPETING INTERESTS]

6.0 Reaction and reflection

[6.1 PROCESS: REPORT WRITING]

[6.1 PROCESS: ORGANISING]

TEACHERS' COMMENTS

[2.0, 3.0, 4.2 ORGANISING, PLANNING AND PROOFREADING: EXCELLENT]

[4.1 TASK ADHERENCE: EXCELLENT]

[5.1 HELP SEEKING: OCCASIONAL]

[5.2 TIME MANAGEMENT: INCONSISTENT]

[5.3 EFFORT PERCEPTION: SUFFICIENT]

[5.3 FEEDBACK RESPONSE: POSITIVE WITH ACTION]

[5.3 SELF-AWARENESS PERCEPTION: ACCURATE]

CASE 2: BARBARA

1.0 Existing knowledge awareness

[1.1, 1.2 WORK SELF-EFFICACY JUDGEMENT: CONTENT]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: ELECTRONIC AND NOTE TAKING]

[2.2 SORTING AND SELECTING: INCLUDES ALL INFORMATION].

[2.3 SELF-AWARENESS: ORGANISING]

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.4 SELF-AWARENESS: LEARNING STYLE]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: TEXT BOOK]

[4.1 TASK ADHERENCE: CLASS NOTES]

[4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, MAKES SENSE]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: TEACHER].

[5.1 HELP SEEKING: TEACHER FROM DIFFERENT CLASS]
[5.2 ASSESSMENT PREPARATION ENVIRONMENT: COLLEGE LIBRARY
JUSTIFICATION]
[5.4 SELF-AWARENESS: TIME MANAGEMENT]

6.0 Reaction and reflection

[6.1 PROCESS: REPORT WRITING]
[6.1 PROCESS: RESOURCE SELECTION]

TEACHERS' COMMENTS

[2.0/3.0 PLANNING/ORGANISING: INCONSISTENT]
[4.1 TASK ADHERENCE: MARGINAL].
[4.2 PROOFREADING: POOR]
[5.1 HELP SEEKING: CONSISTENT]
[5.2 TIME MANAGEMENT: CONSISTENT]
[5.3 EFFORT PERCEPTION: SUFFICIENT] [5.3 FEEDBACK RESPONSE:
NEGATIVE]
[5.3 SELF-AWARENESS PERCEPTION: ACCURATE UNABLE TO
ADJUST]

CASE 3: COLIN

1.0 Existing knowledge awareness

[1.1, 1.2 SCHOOL SELF-EFFICACY JUDGEMENT: REPORT WRITING].

2.0 Organising information

[2.2 SORTING AND SELECTING: ASSESSES RELEVANCE]

3.0 Planning and writing

[3.2 PRIOR KNOWLEDGE APPLICATION]
[3.3 TASK ANALYSIS]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE]

[4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, MAKES SENSE, ANSWERS QUESTIONS, GRAMMAR, SPELLING]

[4.3 SELF-AWARENESS: WRITING SKILLS]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: HOME, CONTENT]

[5.2 TIME MANAGEMENT: SPACED OVER TIME]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

[5.4 SELF-AWARENESS: TIME MANAGEMENT]

[5.4 SELF-AWARENESS: COMPETING INTERESTS]

6.0 Reaction and reflection

[6.2 OUTCOME: RESULT SATISFACTION]

[6.1 PROCESS: TIME MANAGEMENT EVALUATION]

TEACHERS' COMMENTS

[2.0, 3.0, 4.2 PLANNING ORGANISING PROOFREADING: POOR]

[4.1 TASK ADHERENCE: INCONSISTENT]

[5.1 HELPSEEKING: NEGATIVE]

[5.2 TIME MANAGEMENT: CONSISTENT]

[5.3 EFFORT PERCEPTION: SUFFICIENT/INCONSISTENT]

[5.3 RESPONSE TO FEEDBACK: POSITIVE WITH ACTION]

[5.3 SELF-AWARENESS PERCEPTION: ACCURATE]

CASE 4: DONNA

1.0 Existing knowledge awareness

[1.1, 1.2 SCHOOL: SELF-EFFICACY JUDGEMENT: REPORT WRITING]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: NOTETAKING AND ELECTRONIC].

[2.2 SORTING AND SELECTING: INCLUDES ALL INFORMATION]

3.0 Planning and writing

[3.1 WRITING SEQUENCE].

[3.2 PRIOR KNOWLEDGE APPLICATION]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE]

[4.2 REVISION STRATEGY: PROOFREADS AT END, MAKES SENSE]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: PEER, HOME]

[5.2 TIME MANAGEMENT: IN CLASS]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION].

[5.4 SELF-AWARENESS: CRAMMING]

6.0 Reaction and reflection

[6.1 PROCESS: TIME MANAGEMENT]

[6.2 OUTCOME: EFFORT]

TEACHERS' COMMENTS

[2.0, 3.0 PLANNING ORGANISING: GOOD]

[4.1 TASK ADHERENCE: INCONSISTENT]

[4.2 PROOFREADING: INCONSISTENT]

[5.1 HELPSEEKING: OCCASIONAL]

[5.2 TIME MANAGEMENT: CONSISTENT]

[5.3 EFFORT PERCEPTION: SUFFICIENT]

[5.3 RESPONSE TO FEEDBACK: POSITIVE WITH ACTION]

[5.3 SELF- AWARENESS PERCEPTION: ACCURATE MOST OF THE TIME]

CASE 5: ELIZA

1.0 Existing knowledge awareness

[1.1, 1.2 OTHER SELF-EFFICACY JUDGEMENT: REPORT WRITING]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: ELECTRONIC]

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.2 PRIOR KNOWLEDGE APPLICATION]

[3.3 TASK ANALYSIS]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

[4.2 REVISION STRATEGY: SPELLING, PROOFREADS MORE THAN ONCE].

5.0 Regulation of behaviour

[5.1 HELP SEEKING: HOME]

[5.2 TIME MANAGEMENT: SPACED OVER TIME]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

[5.4 SELF-AWARENESS: TIME MANAGEMENT]

6.0 Reaction and reflection

[6.2 OUTCOME: RESULT SATISFACTION]

TEACHERS' COMMENTS

[2.0, 3.0 PLANNING AND ORGANISING GOOD].

[4.1 TASK ADHERENCE: GOOD/EXCELLENT].

[4.2 PROOFREADING: UNABLE TO COMMENT]

[5.1 HELP SEEKING: MOST OF THE TIME].

[5.2 TIME MANAGEMENT: CONSISTENT].

[5.3 EFFORT PERCEPTION: GOOD/EXCELLENT/OVER AND ABOVE]

[5.3 RESPONSE TO FEEDBACK: GOOD/EXCELLENT]

[5.3 SELF-AWARENESS PERCEPTION: ACCURATE MOST OF THE TIME]

CASE 6: FRANK

1.0 Existing knowledge awareness

[1.1, 1.2 OTHER SELF-EFFICACY JUDGEMENT: CONTENT]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: ELECTRONIC AND NOTE TAKING]

[2.2 SORTING AND SELECTING: ARRANGES IN ORDER AND ASSESSES RELEVANCE]

[2.3 SELF-AWARENESS: ORGANISING]

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.4 SELF AWARENESS: PLANNING AND WRITING]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE]

[4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, FLOW]

[4.3 SELF-AWARENESS: WRITING ADJUSTMENT]

[4.3 SELF-AWARENESS: WRITING AND REVISION SKILLS]

[4.3 SELF-AWARENESS: TASK REFLECTION]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: HOME/PEERS]

[5.2 TIME MANAGEMENT: FREE TIME]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

[5.4 SELF-AWARENESS: CRAMMING/COMPETING INTERESTS]

6.0 Reaction and reflection

[6.2 OUTCOME: RESULT SATISFACTION]

[6.1 PROCESS: HELP SEEKING]

TEACHERS' COMMENTS

[2.0 3.0 PLANNING AND ORGANISING GOOD TO EXCELLENT]

[4.1 TASK ADHERENCE: UNABLE TO COMMENT]

[4.2 PROOFREADING EXCELLENT]

[5.1 HELP-SEEKING: CONSISTENTLY]

[5.2 TIME MANAGEMENT: POOR]

[5.3 EFFORT PERCEPTION: OVER AND ABOVE]

[5.3 RESPONSE TO FEEDBACK: POSITIVE]

[5.3 SELF-AWARENESS PERCEPTION: INACCURATE]

CASE 7: GARY

1.0 Existing knowledge awareness

[1.1, 1.2 SCHOOL SELF-EFFICACY JUDGEMENT: REPORT WRITING]

[1.1 OTHER: CONTENT]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: ELECTRONIC]

[2.2 SORTING AND SELECTING: RELEVANCE].

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.2 PRIOR KNOWLEDGE APPLICATION]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE].

[4.2 REVISION STRATEGY: PROOFREADS MORE THAN ONCE, GRAMMAR, VOCABULARY]

[4.3 SELF-AWARENESS: WRITING SKILLS].

5.0 Regulation of behaviour

[5.1 HELP SEEKING: HOME]

[5.2 TIME MANAGEMENT: WHEN FEELS LIKE IT]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

6.0 Reaction and reflection

[6.1 PROCESS: TEACHER INSTRUCTION SATISFACTION]

[6.2 OUTCOME: EFFORT EVALUATION]

TEACHERS' COMMENTS

[2.0 3.0 PLANNING AND ORGANISING: INCONSISTENT]

[4.1 TASK ADHERENCE: INCONSISTENT]

[4.2 PROOFREADING: POOR]

[5.1 HELP SEEKING OCCASIONAL]

[5.2 TIME MANAGEMENT: INCONSISTENT]

[5.3 FEEDBACK RESPONSE: POSITIVE WITH ACTION]

[5.3 EFFORT PERCEPTION MINIMAL/ENOUGH TO PASS]

[5.3 SELF-AWARENESS PERCEPTION: UNABLE TO COMMENT]

CASE 8: HELEN

1.0 Existing knowledge awareness

[1.1 WORK: CONTENT]

2.0 Organising information

[2.1 INFORMATION GATHERING PROCESS: ELECTRONIC]

[2.2 SORTING AND SELECTING: ASSESSES RELEVANCE]

[2.3 SELF-AWARENESS: ORGANISING].

3.0 Planning and writing

[3.1 WRITING SEQUENCE]

[3.4 SELF-AWARENESS: PLANNING AND WRITING]

4.0 Monitoring writing progress

[4.1 TASK ADHERENCE: ASSESSMENT GUIDE/TEXTBOOK]

[4.2 REVISION STRATEGY: DRAFT AND END, MAKES SENSE FLOW, SPELLING].

[4.3 SELF-AWARENESS: AUDIENCE]

5.0 Regulation of behaviour

[5.1 HELP SEEKING: TEACHER/HOME]

[5.2 TIME MANAGEMENT: DAYS NOT AT TAFE]

[5.3 ASSESSMENT PREPARATION ENVIRONMENT: HOME JUSTIFICATION]

7.0 Reaction and reflection

[6.1 PROCESS: WRITING]

[6.2 OUTCOME: EFFORT EVALUATION]

TEACHERS' COMMENTS

[2.0, 3.0, 4.2 PLANNING, ORGANISING PROOFREADING: POOR].

[4.1 FOLLOWING MARKING GUIDES: MARGINAL]

[5.1 HELP SEEKING CONSISTENTLY]

[5.2 TIME MANAGEMENT: GOOD]

[5.3 EFFORT: ENOUGH TO PASS]

[5.3 FEEDBACK RESPONSE POSITIVE WITH ACTION]

[5.3 SELF-AWARENESS PERCEPTION: ACCURATE WITH ADJUSTMENT]

Appendix 5 - Ethical approval for research involving humans

memorandum

To	Associate Professor Rob Cavanagh, Education
From	A/Professor Stephan Millett, Chair, Human Research Ethics Committee
Subject	Protocol Approval HR 35/2009
Date	29 October 2009
Copy	Dr Christopher Hurst Education Christine Couanis (66 Tissington Drive, Darch WA 6065) Graduate Studies Officer, Faculty of Humanities



Office of Research and Development

Human Research Ethics Committee

TELEPHONE 9266 2784
FACSIMILE 9266 3793

EMAIL hrec@curtin.edu.au

Thank you for your application submitted to the Human Research Ethics Committee (HREC) for the project titled "An Investigation of Academic Self-Regulation in Young Adults in Vocational Education and Training in a Technical and Further Education College". Your application has been reviewed by the HREC and is approved.

- You have ethics clearance to undertake the research as stated in your proposal.
- The approval number for your project is **HR 35/2009**. Please quote this number in any future correspondence.
- Approval of this project is for a period of twelve months **29-10-2009 to 29-10-2010**. To renew this approval a completed Form B (attached) must be submitted before the expiry date **29-10-2010**.
- If you are a Higher Degree by Research student, data collection must not begin before your Application for Candidacy is approved by your Faculty Graduate Studies Committee.
- The following standard statement **must be** included in the information sheet to participants:

This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR 35/2009). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to the Curtin University Human Research Ethics Committee, c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth, 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

Applicants should note the following:

It is the policy of the HREC to conduct random audits on a percentage of approved projects. These audits may be conducted at any time after the project starts. In cases where the HREC considers that there may be a risk of adverse events, or where participants may be especially vulnerable, the HREC may request the chief investigator to provide an outcomes report, including information on follow-up of participants.

The attached **FORM B** should be completed and returned to the Secretary, HREC, C/- Office of Research & Development:

When the project has finished, or

- If at any time during the twelve months changes/amendments occur, or
- If a serious or unexpected adverse event occurs, or
- 14 days prior to the expiry date if renewal is required.
- An application for renewal may be made with a Form B three years running, after which a new application form (Form A), providing comprehensive details, must be submitted.

Regards,

A/Professor Stephan Millett
Chair Human Research Ethics Committee

Appendix 6 – Participant information sheet for students



SCHOOL OF EDUCATION

PARTICIPANT INFORMATION SHEET

AN INVESTIGATION OF ACADEMIC SELF-REGULATION IN YOUNG ADULTS IN VOCATIONAL EDUCATION AND TRAINING

My name is Christine Liveris. I am currently completing a piece of research for my Masters of Education at Curtin University of Technology.

Purpose of Research

My research has stemmed from a general concern amongst teachers that many younger students in Vocational Education and Training (VET) are unwilling or unable to take control of their own learning. This is a very important aspect of VET and I am interested in investigating what self-regulation processes you use while preparing the submission of a written report. Self-regulation processes can be described as the way you plan, monitor, organise and assess your own learning. I believe the results of this study will improve teaching and learning practices in vocational education and training and ultimately result in better outcomes for our students.

Your role

In this study I am inviting students to participate in an audio-taped interview after submission of a written report. I expect each interview to take about twenty minutes.

The interviews will be conducted at times mutually agreed between us. This will ensure minimum disruption to your learning.

Consent to Participate

Your involvement in the research is entirely voluntary. You have the right to withdraw at any stage without it affecting your rights or my responsibilities. When you have signed the

consent form you are agreeing to participate and allow me to use your data in this research.

Confidentiality

The information you provide will be kept separate from your personal details to which only I will have access. The interview transcript will not have your name or any other identifying information on it and in adherence to university policy, the interview tapes and transcribed information will be kept in a locked cabinet for five years, before it is destroyed.

Further information

This study has been approved by the Curtin University Human Research Ethics Committee (Approval Number HR35/2009). The Committee comprises members of the public, academics, lawyers, doctors and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained by writing to Curtin University Human Research Ethics Committee, C/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth 6845, by telephoning 9266 2784, or by emailing hrec@curtin.edu.au.

If you would like further information about the study, please feel free to contact me on 9427 1362 or by email: christine.couanis@central.wa.edu.au. Alternatively, you may like to contact one of my supervisors:

Associate Professor Rob Cavanagh on 9266 2162 or email R.Cavanagh@exchange.curtin.edu.au

Dr Chris Hurst on 9266 2196 or e-mail C.Hurst@curtin.edu.au

Thank you very much for your involvement in the research, your participation is greatly appreciated

This study has been approved by the Managing Director, Central Institute of Technology

Appendix 7 – Participant information sheet for teachers



SCHOOL OF EDUCATION

PARTICIPANT INFORMATION SHEET

AN INVESTIGATION OF ACADEMIC SELF-REGULATION IN YOUNG ADULTS IN VOCATIONAL EDUCATION AND TRAINING

I invite you to participate in an educational research project which I am conducting as part of my studies towards my Masters in Education degree under the supervision of Associate Professor Robert Cavanagh and Dr Christopher Hurst of Curtin University of Technology.

Being able to regulate your own learning is viewed as the key to successful learning; however, many students struggle to attain this in their methods of study. The aim of this study is to investigate the characteristics of younger learners in a self-regulated learning environment. I believe that the results of this study will improve teaching and learning practices in vocational education and training and ultimately result in more successful outcomes for students.

In this study I am asking Business and Management Teachers for permission to administer a interview students in their class. I then plan to record interviews with a minimum of ten students on the basis of age and mode of entry. Each interview will take about twenty minutes and will be conducted after students have submitted a written report assessment. Student interviews will be conducted at times mutually agreed between myself and the teacher/s involved, to ensure minimal disruption to the learning program of the students. Possible interviews with teachers will be within Professional Development or Activities Related to Delivery time.

Complete anonymity of participating people and the college is assured at all times and the only persons who will have access to the collected data will be myself and my supervisors. At the same time, I assure you that every contribution to this project will be equally appreciated and greatly valued.

This study will be carried out according to the principles set out by the “National Statement on Ethical Conduct in Research involving Humans”. Curtin University of Technology’s Human Research Ethics Committee has approved the study(Approval Number HR35/2009). The Committee is comprised of members of the public, academics, lawyers, doctors and pastoral carers. Its main role is to protect participants. If needed, verification of approval can be obtained either by writing to Curtin University Human Research Ethics Committee, C/- Office of Research and Development, Curtin University of Technology, GPO Box U1987, Perth 6845 or by telephoning 9266 2784 or by emailing hrec@curtin.edu.au.

If you have any questions about the research, please contact me on 9427 1362 (work) or my supervisors on 9226 2159. I can also be contacted via e-mail at couabcd@inet.net.au.

If you would like further information about the study, please feel free to contact me on 9427 1362 or by email: christine.liveris@central.wa.edu.au. Alternatively, you may like to contact one of my supervisors:

Associate Professor Rob Cavanagh on 9266 2162 or email
R.Cavanagh@exchange.curtin.edu.au

Dr Chris Hurst on 9266 2196 or e-mail C.Hurst@curtin.edu.au

Thank you very much for your involvement in the research, your participation is greatly appreciated

This study has been approved by the Managing Director, Central Institute of Technology

Appendix 8 – Consent form



SCHOOL OF EDUCATION

INFORMED CONSENT FORM

AN INVESTIGATION OF ACADEMIC SELF-REGULATION IN YOUNG ADULTS IN VOCATIONAL EDUCATION AND TRAINING

Consent

- I understand the purpose and procedures of the study
- I agree to being interviewed as part of the study
- I have been provided with the participant information sheet
- I understand that my involvement is voluntary and I can withdraw at any time
- I understand that no personal identifying information like my name and address will be used and that all information will be securely stored for 5 years before being destroyed
- I have been given the opportunity to ask questions
- I agree to participate in the study outlined to me

Name: _____ Date _____

Signature _____

Researcher _____ Date _____

Appendix 9 – Letter to Managing Director, Central TAFE

66 Tissington Drive
DARCH WA 6065
9303 2414

17 October 2012 7th July 2009

Mr Neil Fernandes
Managing Director
Central TAFE
25 Aberdeen Street
NORTHBRIDGE WA 6003

Dear Neil

I am currently in my 2nd year of a Master of Philosophy (Education), School of Education, Curtin University. This degree by research was offered through Curtin University and the Participation Directorate (Department of Education and Training) in 2007. Proposed research was to contribute to educational knowledge in the area of raising the school leaving age.

The title of my research is: **An investigation of academic self-regulation in young adults in Vocational Education and Training in a Technical and Further Education College.** I received candidacy in May 2008 and ethics approval from Curtin University Human Research Ethics Committee in May 2009. I am now seeking college approval to conduct my research.

The problem underpinning my research is a general concern amongst academics that many younger students in Vocational Education and Training are unwilling or unable to take control of their learning despite this being a key component of the learning environment. Being able to regulate your own learning is viewed by educational psychologists and policy makers as the key to successful learning, however, most students struggle to attain this in their methods of study.

The intent of my research is to investigate academic self-regulation characteristics of young adults in Vocational Education and Training to gain a better understanding of this phenomenon. Here is a brief overview of the procedure.

Information session:

- At student induction, I (as the researcher) will conduct an information session with participants to inform them of the nature of the study.
- Potential participants will be given an information sheet and consent form to complete and return to the researcher 1st week of semester.

Recruitment:

- Participants will be recruited purposively from the Certificate IV in Business enrolled full-time in Semester 1, 2010
- They will be aged between 18 and 25
- It will be their first semester in a TAFE college
- They will be enrolled in a unit that requires the submission of a written report

Research design:

- Multiple case studies – maximum 15 students
- Individual semi-structured interviews will be conducted in the week after participants submit a written report.

Data analysis:

- The researcher will seek permission to record interviews
- Interviews will be arranged with the student and the student's lecturer at a mutually agreeable time that will cause minimum disruption to the student's learning program
- Transcribed data from interviews will be manually sorted and coded to expose self-regulation characteristics

I would like to pilot the interview questions Semester 2, 2009 and conduct the research Semester 1, 2010. I feel this will be a very worthwhile study for the college. Being able to self-regulate relates directly to Employability Skills, specifically self-management, planning and organising, and impacts upon Module Load Completion Rates. Therefore the results of my study should contribute to the development of policy initiatives relating to sustainable quality teaching and learning practices in VET and TAFE.

I have received approval from Ros Howell, Business and Management Learning Portfolio Manager, to conduct my research with business students and I look forward to receiving a response to my request for college approval. I would be happy to meet with you to discuss my research proposal in more detail or to deliver a presentation to College Executive if required. My supervisor at Curtin University is Associate Professor Rob Cavanagh.

Yours sincerely

Christine Liveris BA (Training and Development) ASL1
Lecturer
Business and Management

Email: christine.liveris@central.wa.edu.au
Extension: 1362

Appendix 10 – Assessment Task

ESTABLISH NETWORKS - INDIVIDUAL ASSESSMENT

Establishing networks is imperative to future business and personal success for many people. Having an understanding of how and where to look for relevant networks is essential. This assessment will require you to think about the work you are currently in or would like to be doing in the future and create objectives and a mind map of the essential network to help you succeed. You will be required to write a **report** of no more than 1000 words outlining the following:

1. Description of the job you would like to be doing in the future and the skills (minimum of **7**) you will need to develop to be able to do the job.
2. The main support networks that will need to develop to assist you in reaching your career goal **and why**.
3. A mind map of your project network with evidence of new contacts and existing contacts (both categories have to be clearly indicated).
4. List the professional associations that are relevant to your chosen career path. Provide evidence of research into these associations.

Included with your report should be an attached database which may be in written or typed form. Choose the contact that proved most beneficial and describe how the relationship began. What strategies did you use to make this relationship effective for both parties. How do you plan to maintain this relationship.

Your database should contain each of your contacts names and numbers as well as a description of the **functions** and **support** they are able to provide to your chosen business/industry role.

Contact with potential contacts can be via email, phone, mail or in person as long as the above criteria is met. Your contacts should also be grouped in your database according to your mind map breakdown for easy contact and reference in the future.

Write Complex Documents

This report is an opportunity for you to practice report writing and referencing in preparation for the unit "Write Complex Documents". It requires you to find two or more definitions of "networking" from books and online resources to include in your report. Information on referencing will be presented to you in the classroom and in your library session.